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The Birds of the Andaman and  
Nicobar Islands

BY

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*(With a map and two plates)*

INTRODUCTION

During the many years in which as Secretary of the Bombay Natural History Society I was closely associated with its collections, I had felt the absolute lack of ornithological material from the Andaman and Nicobar Islands, where no work has been done in the last fifty years. Having now time to spare, I thought it worth while to visit the islands and make an attempt towards filling the gap.

I had the good fortune to know Mr. A. K. Ghosh, I.C.S., Secretary, Ministry of Education (Science), who was for some time Commissioner in the Andamans. He gave me an indication of the nature of the country and of conditions there, and we decided that it would be best for me to make a preliminary visit to establish contacts and investigate possibilities and costs.

PRELIMINARY VISIT

Fr. Santapau, the Director of the Botanical Survey, agreed to send a man with me as they were interested in a more extensive survey of the area, and we decided to go out as soon as the weekly air service between Calcutta and Port Blair recommenced after the monsoon, about 15th October 1963. The recommencement was very erratic and it was only

after several false alarms, bookings, and re-bookings that at 5-30 a.m. on Friday the 8th November I found myself in Calcutta and, with Mr. Balakrishnan of the Botanical Survey, caught the 6-30 plane, reaching Port Blair at 2-30 p.m. *En route* we stopped at Rangoon. I saw at the aerodrome there a Pied Harrier (*Circus melanoleucos*) and dark-necked House Crows (*Corvus splendens insolens*). Kites (*Milvus migrans govinda*) and Swallows (*Hirundo rustica*) were common. House Sparrows (*Passer domesticus*) were nesting under the eaves of the airport building; at least two pairs appeared to have their nests side by side—I wonder if this communal habit, which has been noted in the birds from Karachi and further westwards, exists here.

We left after a halt of about half an hour, flew over the Golden Pagoda and the Irrawaddy, and soon crossed hilly country—some heavily wooded and some denuded and eroded. White cumulus clouds appeared on all sides, above and below, with bits of blue sea and sky showing in many places.

The clouds took innumerable shapes and there seemed no end to the pictures one could see in them. Some time before landing the Andamans became visible—green islands set in a sea of blue. A jeep kindly sent by the Chief Commissioner, Mr. B. N. Maheshwari, met me at the aerodrome and took me to the Guest House at Haddo, about a mile from Port Blair. The Guest House, situated on a hillock overlooking the harbour, is well furnished and is fitted with electric lights and a telephone. Before the day was over I met Mr. K. N. Chaudhri, the Chief Conservator of Forests, and Mr. J. C. Varma, the Divisional Forest Officer. I got in touch with Mr. Norman Young, who lives almost opposite the Guest House and had been mentioned to me as a keen shikari, and met a naval officer who had been out and had shot about 10 Imperial Green Pigeon (*Ducula aenea*), of which I obtained one skin.

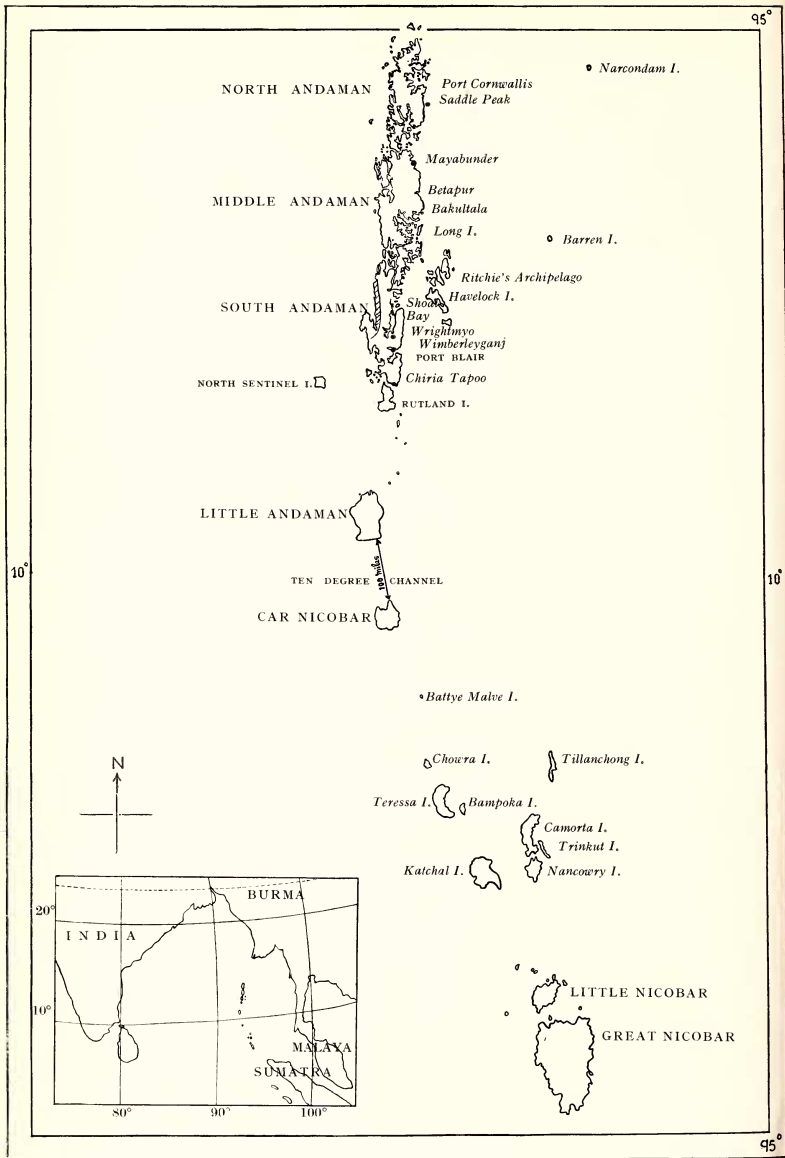
The weather was ideal with an occasional shower—I think it rained scarcely half a dozen times during the week I was there. In the evening, frog calls in the gardens were followed up and specimens of *Rana limnocharis* and *Microhyla ornata* obtained. Both these frogs are common around Bombay, but I did not recognize their calls. In the bungalow the gecko (*Hemidactylus frenatus*) was common; its call, a loud *chuk-chuk* uttered five times, was very similar to that of *H. leschenaulti* at Bombay, except that the *ch* part was perhaps slightly more prolonged. On Saturday morning I walked round the neighbourhood and found that deforestation had eliminated the indigenous avifauna and given a footing to introduced forms like the Common Myna (*Acridotheres tristis*), the House Sparrow (*Passer domesticus*), and the Grey Partridge (*Francolinus pondicerianus*), which were the most prominent birds at the Guest House, the calls of the last being heard from not far away.



Mangrove on narrow branch of Shoal Bay Creek, South Andaman

Frequented by the Pale Serpent Eagle. Here I got glimpses of the Ruddy Kingfisher which quivered like a dry mangrove leaf and got away before I realised my mistake.

(Photo : H. Abdulali)



Port Blair is an excellent land-locked harbour surrounded by low hills, described by Hume (1874 : 151) as magnificently wooded but now almost treeless and green only with grass and occasional shrubs and trees. The town (Aberdeen) is crowded and about 3 miles from Chatham Island, where the larger vessels berth.

This island is linked with the mainland (South Andaman Island) by a floating bridge of logs. It carries a Government saw-mill and is the headquarters of the Forest Department. Haddo, half way between Aberdeen and Chatham Island, is a suburb with two Guest Houses and the Naval Headquarters.

On Saturday afternoon I called on Mr. Maheshwari who was very cordial and offered me all necessary facilities, on payment, if my trip was sponsored by Government. He invited me to join him on the following day in a visit to Mt. Harriet, across the harbour, to inspect an experimental coffee plantation. We left by a small motor-boat, landed at Bambooflats (where Mr. Young manages a plywood factory), and motored some ten miles to Mannarghat. The climb was long and strenuous, though a path had been cleared. We returned by road, a long thirty-mile drive. The low country along the road was under paddy, the forest being restricted to the hills.

Owing to the occasional drizzle, the long straggling party, and the distraction created by leeches, very few birds were seen during the walk through the forest, but most of the parakeets, kingfishers, rollers, and bee-eaters seen in the open country were new to me, which together with the promise of all that was hidden in the forests, convinced me that a collecting trip would be worth while.

Resulting perhaps from the slight wetting and the many leech bites on Mt. Harriet, I had an attack of ague one night and woke up sweating profusely, and I felt very ill for a day ; fortunately there was no repetition and on the following day I took a taxi to Chiria Tapoo, at the southern end of South Island, intending to visit by boat some caves where Edible-nest Swifts nest. When we arrived, the fishermen had left and we could not get a boat !

I spent a week at Port Blair waiting for the return plane. Mr. Young took me to Bambooflats one day, and Mr. Sulaiman Parekh of Jadwet Trading Co. lent me a motor-boat on which I visited one or two islands and spent some time at Dundas Point on the opposite shore.

Another morning, with Mr. Maheshwari, I visited Ross Island, the administrative headquarters in the British days. Government House was a gigantic building largely of wood, now in disuse and falling to pieces. The island is largely overgrown with scrub (*Eupatorium* sp.) and we could travel only on the narrow footpath which encircled it, and on the remnants of the old roads. I picked up a dying tern (*Sterna anaethetus*) on one of the paths, and never saw another either on this or

on the main trip later. Peafowl were introduced on this island many years ago and apparently bred freely, but they disappeared during the Japanese occupation. A few more have been released recently and will no doubt establish themselves in due course. A small pond, about 60 yards across, held an empty wire cage in one corner, and I was told that an attempt had been made to introduce Spotbill Duck. No details were available, but it appeared that they had not survived for long.

I collected a few birds, and some lizards and frogs, and though I got nothing of particular interest it was evident that the area was interesting and, with the goodwill and co-operation which were available, a longer trip would be worth while.

### THE MAIN TRIP

Upon my return to Bombay, I set about making arrangements for the main trip. The Bombay Natural History Society had promised me the loan of two junior assistants to look after the skinning. The Ministry of Education (Science) formally sponsored the trip and helped me to obtain the necessary shotgun ammunition from the Ordnance Factory at Kirkee, Poona.

In the meantime, the Botanical Survey had decided on an independent expedition. I arranged to sail on my own from Calcutta by M.V. *Andamans* on the 3rd February 1964. Two days before I left Bombay, one of the assistants reported ill; I was fortunately able to obtain the services of Lawrie Nogueira from the Prince of Wales Museum, his health certificate and equipment all being arranged in a great hurry. He and P. B. Shekar of the Society joined me in Calcutta where we found the boat was not leaving on the 3rd and that the actual date would be settled in a day or two!

We sailed finally on the night of 5th February, but the morning found us still in the Hooghly anchored off some jute mills! While we waited, parties of gulls numbering 20 to 30 hung around the ship, looking for food to be thrown overboard.

They were mostly Blackheaded Gulls (*Larus ridibundus*) with an occasional (2 out of 30) *brunnicephalus*. In addition to their larger size and the mirrors on the wing tips, the latter have a more prominently red bill. For the rest of the trip I saw no other birds, though I spent quite some time on the deck looking for them. A large turtle, a few dolphins, and many flying fish were all that I saw. The dark (blue) colour of the water suggested that this was the possible origin of the name *Kala Pani* (black water) now commonly applied to the Andamans in a derogatory sense. On the morning of the 9th we were along the western coast of the Andamans. Between North Sentinel and South Andaman I saw, several hundred yards from the boat, a large oval patch

on the water, 50 to 60 feet long and 8 to 10 feet wide. It was pale green in colour, strikingly different from the dark blue (almost black) water around it. The first impression was of a drift of algae, but through glasses I saw small yellowish oval patches, 5 to 6 inches long and 3 to 4 inches wide, 'floating' in it. It was impossible to judge what the main green effect was and how the yellow patches were fixed in it. The mass appeared to be stationary and, only after we had passed it, did I realise that I had probably seen a whale-shark basking on the surface! The boat berthed at 5 p.m. on the 9th and I was once more in the Islands.

#### THE ANDAMANS AND NICOBARS: A GENERAL DESCRIPTION

The Andaman and Nicobar Islands, running in a more or less north-south line between 13° 30' N. and 6° 45' N. in the Bay of Bengal, are separated from each other by the Ten Degree Channel. They are the summits of a submarine range of hills, 700 miles long, which connects the Arakan Yomas of Burma with Achin Head in Sumatra.

The Andamans, consisting of 204 islands, lie roughly 350 miles from Rangoon in Burma and 750 from Madras. They extend over 219 miles, the extreme breadth is 32 miles, and the whole area of land about 2500 square miles. The largest island is about 50 miles long and 16 wide; the highest point is Saddle Peak (2400 ft.) in North Andaman. All the islands, except Little Andaman, consist of hills enclosing narrow valleys, the whole covered by dense forests descending in many places to the seashore.

Though referred to in literature from the earliest times, the Andamans were in fact quite unknown till the end of the 18th century, when the East India Company in an attempt to control piracy and to prevent the ill-treatment and killing of shipwrecked and distressed mariners tried to establish a permanent settlement, an effort that was not very successful. After the Mutiny of 1857 it was decided to deport some of the many rebels and deserters on hand to the Andamans.

The original inhabitants consisted of several wild and savage tribes, anthropologically identical, short in stature and shiny black in hue. Their sooty black hair grows in small rings and, though evenly distributed over the head, appears to be in the form of tufts. They do not have the thick lips of the African negro and are said to be more closely allied to the Negritos of Malaysia. To begin with they were all hostile, especially the Jerwas and the Onges. All, except the Jerwas, have now been "tamed"; at the same time they are sadly reduced in numbers. I saw a woman at Port Blair who was one of the last seven of her tribe, and a man at Long Island (now employed by a Burmese carpenter working in the Forest Department) was one of the last dozen of his tribe. The Onges, confined to Little Andaman, have still escaped

civilization and survive in some numbers. The Jerwas, with whom there is no peaceful contact, are estimated to be between 500 and one thousand in number. They live on the western side of Middle and North Andaman and hamper the work of the Forest Department, necessitating the leaving of large areas completely untouched by Government.<sup>1</sup>

The Nicobars, comprising 19 islands, lie further south and show a greater variety of scenery, some of the islands being flat and coral-covered. The vegetation is less luxuriant than in the Andamans and the area is of less interest to the Forest Department. These islands have been inhabited for a longer period. Unlike the Andamanese, the inhabitants are Mongoloid.

During the current century, the Andamans have mainly been known as a penal settlement and, except for the work of the Forest Department in various parts of these two groups, there has been little development.

During the last war, the islands were seized by the Japanese and the prisoners were released to work for them. Many garbled and widely differing accounts of the occupation were heard, but I have not seen any authoritative report of this period. Contact with the Jerwas was completely broken off and, when administration was resumed after the war, Government again faced the problem of governing people who could not be spoken to or even seen.

The penal settlement has been discontinued, and the prisoners and their dependents have settled as shopkeepers and petty tradesmen. Forest labour is imported from India, mostly Orissa, and the aboriginal is scarcely visible. There is talk of settling refugees, but I cannot imagine what they will do; such attempts will only lead to the destruction of more forest, and repentance later.

#### VEGETATION

Most of the time I was fortunate enough to be in touch with people (particularly Dr. P. M. Ganapathy) who knew the vegetation and were able to name items which were of immediate interest. These islands have been worked by the Forest Department (though I understood that no working plans existed at the moment!) and many accounts of their vegetation are available. H. G. Champion in *FOREST TYPES OF INDIA AND BURMA* (1936) includes 11 types from the Andamans and has some excellent photographs. Therefore, I will not lengthen this note by attempting to list the trees or describe the vegetation in greater detail.

<sup>1</sup> Some interesting information about the first contacts with and impressions of the aboriginals is contained in papers by Capt. J. C. Haughton, Cols. Albert Fytche, Tytler, and S. R. Tickell in *J. Asiatic Soc. Bengal* (1861) 31 : 251, (1864) 33 : 31-35 and 162-169.



## SOUTH ANDAMANS: 10-19 FEBRUARY 1964

On Sunday morning, the day after my arrival, I started looking around for the transport which I had been promised. Mr. Maheshwari was away in India, and I was told that the jeep which was intended for me was in the workshop. With the help of Mr. T. N. Gill, the Development Officer, it was possible to obtain the jeep late in the afternoon with the repairs uncompleted. I took it with some misgivings, but it gave me excellent service.

I had intended to camp at Mannarghat or Wimberleyganj, but Mr. Young recommended Wrightmyo, at the end of the road, as being in wilder country and I am glad I took his advice. It was impossible for all of us, including a Forest Officer and a newly-acquired cook, to get into the jeep, so we divided the luggage, leaving some of it at the Guest House.

We reached Wrightmyo unannounced at about 9 p.m., and were soon installed in the two-room forest bungalow, about 500 feet up on a forested hill-side. The following morning I walked down to the road which passed by the bottom of the hill, and then another half-a-mile to where it ended at a small pier. A few small houses and huts along the road were occupied by farmers and fishermen of Burmese origin. The pier jutted into a small creek used by forest launches which visit Pachong and other forest depots. We were at the end of what was perhaps the longest road in the Andamans, most transport being by water.

Wrightmyo offered many different types of ecological facies. A light-railway line went past the pier about a mile into the forest, where it ended at the bottom of a gigantic chute down which timber was dropped to the railway line and then loaded on to trolleys with the help of elephants; the labour was mostly Christians from Orissa, there being no trace of any indigenous people. The hills behind the bungalow rose in series to Mt. Harriet which I had visited in November, but I did not make another attempt finding sufficient material much lower and nearer to keep me and the assistants busy.

One day I went up in the forest launch to Pachong, a forest working camp. The tidal creek (Shoal Bay) ran for many miles and the mangroves, mostly *Rhizophora mucronata* and *Bruguiera gymnorhiza*, formed dense forests of timber quite close to the water. Their roots washed by every tide were slimy with mud and it was extremely difficult to move even a few paces through this maze on foot. It took me quite some time to recover a bird which I dropped a few yards off the shore, and it was impossible to imagine how the aboriginals, as stated by Mouat, ran over the mangrove roots, presumably of this kind.

Immediately upon my arrival at Wrightmyo, a bush-policeman Balacius, armed with an ancient .410 rifle, was attached to me for defence

against the Jerwas. At Pachong there were more such policemen and there was great consternation when I walked unattended a few hundred yards into the woods and back. My personal guard had been there for 5 years but had not seen a Jerwa, nor had any others whom I questioned at Pachong. The usual reply which we got was that you only see a Jerwa once, just before you die, when he comes to retrieve his arrow! I was told by Forest Officers that, when the places for drinking water become more restricted with the approach of the dry weather, the Jerwas (like all jungle creatures) necessarily approach the various camps which are situated near their water-holes. All this sounded unbelievable but a couple of days later, while I was driving along the road near Wrightmyo, a Forest Officer stopped me and showed me two arrows which he said had been shot at somebody at Pachong the same morning.

Many of the high trees have deep buttresses and, if a Jerwa chose to hide behind one along a forest path or near a water-hole, there would be little or no chance of his being detected—to ensure that there was no ambush, one would have to make a 20-yard circle round every tree! The trees were so high that Imperial Green Pigeon in the higher branches only peered down enquiringly when No. 6 shot was fired at them.

As I said before, many types of country were accessible. Immediately across the road at the bottom of the hill ran a line of paddy fields about 200 yards wide and half a mile long. Snipe and Golden Plover frequented the wet patches, while Bee-Eaters, Swallow-Shrikes, Rollers, and other insect-eating birds were found on the edge of the forest immediately beyond. The mangrove creeks held several kinds of kingfishers with an occasional Serpent or Whitebellied Fishing Eagle. Mr. Young arranged a pigeon shoot at Maymyo, nearer to Port Blair. The pigeons were not very co-operative, but travelling to and fro I saw many interesting types of country. Along some of the tidal creeks the high 4-foot fern *Asplenium acerifolium* formed dense patches, while the small palm *Phoenix palludosa* grew on swampy margins. The denuded uncultivated hill-sides were covered with *Eupatorium* sp. (Compositae) which takes the place of *Lantana* in India.

On this trip we arranged for a man and a boat to take me on the following morning to the Swift caves at Chiria Tapoo. After lunch at Wrightmyo I drove out to a rubber plantation near Mannarghat to collect Hawk Owls which I had heard in that area. Two were obtained without much difficulty as they called from exposed perches a little after dark. I led the way back to the car, torch in one hand and gun in the other. The bush-policeman Balacius, who followed carrying the birds, suddenly shouted '*Samp kata*' (snake has bitten). I swung round and got my torch on to a middle-sized snake disappearing into the grass, but my gun was over my left arm and I could not shoot it. Balacius was bitten just over the ankle and I was very worried. Getting

him into the jeep I drove to Wimberleyganj and burst on a group of Forest Officers at a game of cards. Not particularly perturbed, they suggested that I drive him to the hospital at Bambooflats.

I asked them to telephone the hospital that I was coming and got there in a short time. However there was no trace of the doctor, who was finally produced after much shouting. He had no anti-snake serum and merely lanced the fang-holes, giving me a long talking-to for not washing the leg immediately. I did not recognize the snake but was fairly certain that it was not one of the big five—King Cobra, Cobra, Russell's Viper, Phoorsa, and Krait. Not wishing to assume unnecessary responsibility, I left Balacius at the hospital for the night.

In the morning I picked up Balacius on my way to Chiria Tapoo, none the worse for the incident. At the appointed place we found neither man nor boat! People were few and far between and we wasted an hour or more looking for our man and investigating other means of transport. Again frustrated, we went back a few miles and stopped at a tea-stall at the edge of a forest clearing. The proprietor, a Moplah, was very curious to know what we were doing and when I mentioned the Swift caves he was very excited and said he knew a man who knew the caves and that we could walk to them. This seemed unlikely but, in the absence of an alternative, we drove back. The Moplah then disappeared for a time and returned with a man who that very morning had told us that a boat was necessary. It was now 2 o'clock and, as it is dark by 5, it looked as if the trip must wait till the morrow. However the Moplah, an elderly man, had become very interested and wished to join—he had not seen the caves himself. Rather reluctantly, we started off along a cart-track which soon disappeared into the forest, and we moved along with our guide marching rapidly ahead. In the Andaman forests one can travel more freely than in India, because there is in most places relatively little undergrowth—but it makes it very much easier to get lost. After a while we met the shore again and walked along it. The shore held many forms of sea-life but I was unable to identify many items. After about 2 hours of hard walking, which included scrambling over rocks on the shore, we reached the two caves at Mandapahar and obtained many nests of the Whitebreasted Swift and a few of the edible variety. More details of the caves, the birds, and the nests will be found under Swifts.

The way back was also a scramble as we wished to reach the car before it was too dark. We did the last mile or so in the dark but managed it without much difficulty. A rustle, which alarmed me greatly, proved to be a land crab (*Cardisoma carnifex*) only three inches across the back, but with stout pincers four inches long. The drive back to camp passed through Ferrarganj, named after Lt.-Col. M. L. Ferrar, a Life Member of the Society, who was the Chief Com-

missioner in the Andamans in the thirties. We used torches all around the car but no mammals were seen.

MIDDLE ANDAMANS : 20 FEBRUARY TO 5 MARCH 1964

Having obtained 130 birds of 62 species by the 18th, we returned to Port Blair on the 19th and caught the ferry-boat *Cholunga* on the following morning, reaching Long Island in the Middle Andamans at about 4 p.m. As our luggage was being carried to the Rest House, I met the Divisional Forest Officer, Mr. S. S. Bhattee, at his office above the jetty. He had not received my telegram and was about to leave for Bakultala towards the north. He invited us to accompany him and, transferring most of our luggage to his launch, we moved off. Mr. Bhattee, who is also a member of the Society, was very keen and helped us in many ways.

Unfortunately Bakultala was a forest depot, and the immediate surroundings did not produce many new specimens. A long trolley line ran into the forested areas and we made an interesting trip along it. At lunch one day, a message came that Jerwas had killed a man at a forest camp some miles away. As the chief administrative officer in the area, Mr. Bhattee rushed off to attend to all the formalities and returned the following morning. In the afternoon of the 23rd we moved by motor launch to Betapur. Portions of the coast were scenically enchanting. Betapur, also a forest depot, is situated beside a tidal river, which runs into the sea a few miles away. In a small dug-out we were able to cover some interesting country, on both sides of Betapur and on the opposite bank. Here I saw for the first time the Andaman Teal, whose flight was similar to that of the Whistling Teal. Green Pigeons (*Ducula aenea*) were numerous and, if so inclined, one could take a position under a fig tree in fruit and shoot an indefinite number.

A message that the Chief Conservator of Forests was arriving at Long Island on the 26th brought Mr. Bhattee, and perforce us, back to Long Island on the 25th evening. Here I was put in touch with U Thin, a Burmese carpenter in the employ of the Forest Department and a keen shikari. He and I did several trips together, on foot and by boat, reaching the far end of Long Island as well as Guitar Island to the south. But we got only a few new birds, and it was not possible to keep the skimmers fully employed.

On the 29th Mr. Bhattee took us in his launch to North, Middle, and South Button Islands in Ritchie's Archipelago. The three islands are quite different from each other, and each is interesting and delightful in its own way—sandy beaches, rocky cliffs, high and low forests, and caves where Hume got nests of the Swiftlet (*Collocalia*) almost a hundred years ago. We entered the caves, but saw only one

nest. On the beach, we got our first specimens of the Crab Plover (*Dromas ardeola*), the Great Stone Plover (*Esacus magnirostris*), and Rosy (*Sterna dougalii*), Blacknaped (*Sterna sumatrana*), and Lesser Crested Terns (*Sterna bengalensis*). The beaches held shells and cowries of many hues and sizes, and everybody's pockets were soon bulging. In a small boat we paddled over a coral reef, a spearman poised at the bow to spear the large turtles—we dug up a nest with many eggs which we had for lunch. A large monitor (*Varanus salvator*) was killed and similar eggs were found in its stomach. With so much to see and do we left each island with reluctance and finally turned homewards, already belated, leaving South Button Island, apparently the most interesting, almost unexplored.

Nogueira, who had been 'borrowed' for a month, left for Port Blair to catch the first boat for Bombay or Madras. A little later, we learnt that the Deputy Commissioner's trip to the Nicobars had been cancelled because of the expected visit of Dr. Zakir Hussain, Vice-President of India and a member of our Society, to the Andamans and Nicobars. Realising that the hands of the local officials would be full for some time, I decided to return to Bombay, leaving Shekar to collect on Car Nicobar for two to three weeks.

We returned to Port Blair on the 5th March and found that the boat for Calcutta had left the previous day but I could leave for Madras the next evening—no air-bookings were available. I jumped at the opportunity of a visit to Car Nicobar.

#### CAR NICOBAR : 6 MARCH 1964

Early morning found us on Car Nicobar with a jeep kindly provided for our use. A motor road extends along the length of the island and I drove along until we found it blocked by a fallen tree! In some of the few birds collected the racial differences from the Andaman forms were visible in the field, e.g. Imperial Green Pigeon, Whitecollared Kingfisher, and the Blacknaped Oriole.

Car Nicobar is mostly a coral island, with sandy beaches and largely planted with coconuts—there was little or no undergrowth. I discovered here how easily one can get lost. Leaving the jeep on the road I had walked a short distance to collect Imperial Green Pigeon which were obviously very different from those in the Andamans. I shot one, moved a little further to get another, and then turned back, as I thought. Suddenly I realised that I had walked in the wrong direction and there was nothing by which I could take my bearings! I tried walking 500 paces in one direction, coming back to the same place, and walking again the other way, but this did not help. Shouting

produced no response. Would letting off my two remaining rounds of ammunition be worth while? I could not have been lost for much more than half an hour, but the chance of missing the boat that evening was distressing. Fortunately, Shekar realising that I could not still be chasing pigeons had sallied forth shouting loudly and helped me home. We worked our way back to the jetty after arranging for Shekar to camp with Messrs Akoojee & Co., who have a colony on the island.

I reached Madras in the afternoon of 10th March, and travelling by the night plane arrived in Bombay the next morning.

Shekar stayed on Car Nicobar till the 13th, visiting Nancowry Island by ferry on the 14th and returning to Port Blair on the 15th. Till the 26th he worked around Port Blair, obtaining in all 49 skins. While there were not many additions to the variety of forms, the additional specimens have helped with the taxonomic work.

The object of the trip and the collection were mainly ornithological but, in view of the very scanty information which is available regarding the other vertebrates of this area, I am recording a few of my observations before dealing with the birds.

#### MAMMALS

The largest indigenous wild mammal, the Andaman pig (*Susscrofa andamanensis*), is much smaller than the Indian pig. A sow weighing 56 lb. was obtained at Bakultala, Middle Andamans. This is being mounted for the Prince of Wales Museum of Western India in Bombay. Returning by ferry from Long Island, 4 live pigs were brought on board at Havelock Island, all trussed up and ready for sale at Port Blair. A 30 kg. spring balance weighed the two sows as 24 and 26 kg. (53 and 57 lb.). We estimated the male as 30 to 40% heavier, say 80 lb.—a big boar in India weighs over 300 lb. The Jerwas hunt them on foot and the Indian labourers do the same with the assistance of dogs. The young are said to be striped as in India. In 1962 (*J. Bombay nat. Hist. Soc.* 59: 281) I referred to the possibility of more than one species of pig occurring in the Andamans, but am unable to offer any more information in this respect.

Chital and other deer were introduced into the Andamans '25-30 years ago' [J. Banerji (1955): *J. Bombay nat. Hist. Soc.* 53: 256], and are said to be abundant on some islands. At Port Blair, venison was quoted at Rs. 3 per kg. (though not available!) and mutton at Rs. 6. Chital skins were on sale, and I was told that 20-30 were available every month.

In a retail shop at Port Blair, I obtained a middle-sized deer skin (shot in South Andamans) of one colour and too small and dark to

be a sambar's. It has not been possible to match it with any of the skins of Indian deer available in Bombay<sup>1</sup>.

There were reliable reports of sambar (*Cervus unicolor*) and also a small red deer, probably Barking Deer (*Muntiacus muntjak*). I was taken to Guitar Island (opposite Long Island) in pursuit of a small deer or antelope with pig-like tusks—I only got a glimpse of something that looked too dark for either Barking Deer or Fourhorned Antelope and wonder if it could have been musk-deer.

These would all be relatively recent introductions like the Chital. I was told that the Jerwas do not kill the newly introduced deer, though it is believed that they have learnt to use dogs.

The civet cat (*Paguma larvata tytleri*) has been recorded from the Andamans; I obtained one skin each from Mr. Bhattee and Mr. Young. It has been suggested that the absence of partridge, quail, and other forms of ground-living birds is due to the presence of these civets. Hume obtained reports of megapodes in the Coco Islands<sup>2</sup> and thought he saw their mounds. Kloss (1903 : 328, footnote) suggested that the absence of megapodes in the Andamans may be due to the introduction (?) of the civet cat (*Paradoxurus tytleri*).

One hears of panthers having been introduced to keep down the chital, but I was unable to obtain any definite information. Banerji (loc. cit.) refers to two *females* being released in 1952-53. A responsible officer told me that two had recently been brought from India for release in the Andamans but public opinion was so strongly against it that they were either destroyed or sent back. Perhaps this was a different pair.

Near Port Blair, I saw some palm squirrels (*Funambulus* sp.) apparently recently introduced, but did not note the species.

I had no arrangements for trapping any of the smaller mammals and, except for one or two glimpses of deer (?), the deer skins in the market, and some pig wallows in the forests, I saw no large mammals other than a couple of largish rodents on the road at night.

I collected 11 bats of 6 species of which, at the time of writing, only one *Cynopterus brachyotis brachysoma* Dobson (type locality,

<sup>1</sup> Mr. J. E. Hill, who kindly examined the skin at the British Museum (Natural History), reports that it agrees fairly closely with the Museum's limited material of Sambar from the Malaysian Archipelago but without the skull it is difficult to be quite certain of the identification.—Eds.

<sup>2</sup> In Indian ornithological literature the islands, Great Coco and Little Coco, lying north of the Andamans along the 14th parallel of north latitude are frequently referred to as Cocos. The name in this form must not be confused with the Cocos atoll in the Cocos-Keeling Group, about 14° south of the Equator and 600 miles south-west of Java Head. The few birds of the Cocos atoll are mostly oceanic, and the resident birds have Malaysian affinities. Besides these islands there is an islet in the east Pacific north of the Galapagos known as Isle del Coco. The references in this paper are restricted to Great and Little Coco, irrespective of how they are spelt.—H.A.

Andamans) had been identified with certainty. It is hoped that it will be possible to report on the others in a short time.

Mr. Young's son Maxie mentioned seeing a dugong which had 'bristles as in a pig' on its head or nape. The body is known to be covered by hair-like bristles, and it is curious that J. H. Williams in *THE SPOTTED DEER* (1957, p. 209, Rupert Harte-Davies) says of a manatee in North Andamans: 'She had a short mane on her head, which swept back with her motion'! Blyth (1859, *J. Asiatic Soc. Bengal* 28: 271-298) refers to bones of the dugong (*Halicore indicus* = *Dugong dugon*) being found in a native hut. Though it is now fairly rare, around 1905 it was said to enter Port Blair in parties of two and three (Annandale, *J. Asiatic Soc. Bengal*, 1905, N. S., 1: Footnote at p. 241). The mammals obtained by Abbott & Kloss and reported on by G. S. Miller in *Proc. U.S. Nat. Mus.* (1902, 24: 751-798) appear to form the only systematic collection made in this area, and it is possible that new forms remain to be discovered.

Miller (loc. cit.) notes that all the forms, except the dugong and the bats, could have been introduced by man, either intentionally or otherwise, and the depth of the surrounding sea (though shallow towards Burma) suggests that these islands were separated from the mainland before any mammals reached them.

#### REPTILES AND AMPHIBIANS

We collected and pickled 9 snakes (6 species), 26 lizards (8 species), frogs and toads (7 species). Curiously, all the snakes are already represented in the collections of the Bombay Natural History Society, having been presented by that remarkably active collector Col. Wall. The lizards and amphibians are being examined and a report will be published later, if any material of interest is found.

The few insects and ticks preserved appear to be species common to India.

#### BIRDS

In 1846 Blyth listed some birds obtained in the Nicobars by Mr. Barbe and Capt. Lewis, and later (1863) appended a list of the Andaman birds to Mouat's *ADVENTURES AND RESEARCHES AMONG THE ANDAMAN ISLANDERS*. About the same time Tytler, Beavan, and Ball made some collections, reports on which are included in the bibliography to this paper. In 1872, that extraordinary person, Allan Octavian Hume (who was among other things 'father and founder' of the Indian National Congress!) sent his collector Davison to the islands, who collected some 2000 birds in about six months. In February 1873,



Hume accompanied by several friends (only Stolickza's name is traceable) made a one-month visit to the islands by a chartered boat from Calcutta. The procedure was to make a landing during the day, collect all that was available, and return to the boat in the evening. An interesting account of this trip (Hume 1874) is followed by a report on the collections together with references to all earlier literature on the birds of the Andamans and Nicobars. About the same time collections were made by Captains Ramsay Wardlaw and Wimberley, which were reported upon by Viscount Walden. There was considerable activity for some time, which lapsed until revived by Butler (1899, 1900), Abbott & Kloss (Richmond 1903), and Osmaston (1905-1908). Subsequent to this however, except for half a dozen notes on snipe and other sporting birds, the islands have remained ornithologically untouched. The introduction and recognition of racial, or subspecific, differences necessitated a re-examination of the original collection, but I have seen no evidence of this having been done. When in the field, I collected mainly with a view to add to the Society's collections and paid special attention to the forms which were accepted as different from those in India. While working out the collection, and comparing it with the material available in Bombay, it was soon evident that many of the specimens were different from Indian forms. This has led to the discovery of an unexpected number of new subspecies, some of which were noticed by others earlier, but were ignored by subsequent workers for unspecified reasons.

The list of birds includes several introductions which have established themselves. While these may to some extent be occupying vacant ecological niches, there can be no doubt that they intrude and trespass upon some local forms to the latter's disadvantage. The absence of a natural check is perhaps the main reason for the violence with which introduced forms sometime 'explode'. The African Land Snail (*Achatina fulica*) is an example. I was told it was brought into Port Blair some ten years ago, and has now multiplied to such an extent that gardening and vegetable growing have been rendered difficult. Its depredations in the Guest House gardens were very prominent in November. I was informed that Openbill Storks (*Anastomus oscitans*) were ordered from India to combat this menace, but it was not possible to ascertain how, assuming they eat these snails, the Storks were to be led round the gardens looking for these nocturnal creatures. It is curious how man has always been more anxious to introduce new forms to insular areas, rather than to study those which already exist there.

We obtained in all 312 specimens including 35 from Car Nicobar and Nancowry. In the following list they fall into 112 species and subspecies including four subspecies newly described (Abdulali 1964).

The Zoological Survey of India has, I understand, made three expeditions to the Andaman Islands over the last few years; I am

sorry that it was not possible to ascertain what ornithological material was obtained by them, as they are being worked out independently. My conclusions are therefore to a large extent based on the relatively little material available to me and the literature cited in the bibliography. As many of the references are old and not easily available, I have in many instances quoted the original records and given my reasons for supporting or discrediting them.

The list covers 225 forms, which number is small when compared with say approximately 400 from an equivalent area near Bombay. With further study, this number will no doubt increase but not, I think, to the same extent. Several of the birds listed, e.g. pelican and Brahminy Duck, are based on records of single individuals blown in with storms or cyclones. Bayley-deCastro (1933) refers to two vultures of unnamed species seen after a cyclone. Others are introductions by well-meaning people who failed to see and appreciate the indigenous avifauna. Except for the megapode and the Nicobar Pigeon, the avifaunal affinities appear to be closer to India than to Burma or Malaya. The resident forms in the Andamans and Nicobars, as would be expected in insular species, are often different from each other. It has not been possible to name trinomially a few of both the migrant and the resident birds, and it would perhaps be better to comment on the trends of variations after a closer study has been possible.

#### ACKNOWLEDGMENTS

Before I proceed with the list, I must acknowledge with gratitude the interest shown by Mr. A. K. Ghosh, Secretary, Ministry of Education (Science), which actually encouraged me to make the trip; the financial assistance given by the Bombay Natural History Society, the Prince of Wales Museum of Western India, and the Sir Dorabji Tata Trust; the assistance and co-operation given by Mr. B. N. Maheshwari, Chief Commissioner, and the other officers in the Andamans, without which it would not have been possible to achieve a fraction of the work; the willing co-operation extended by Messrs Norman Young, S. S. Bhattee, Sulaiman Parekh of Jadwet Trading Co., and other residents in the Andamans; the ready and cheerful manner in which Lawrie Nogueira and P. B. Shekar skinned all the birds brought in, large and small, throughout the hours of daylight and even late into the night. Acknowledgments for specific items are made in the text. I must not omit to acknowledge the help received from Mr. M. J. Pereira, Bombay Natural History Society, in handling, measuring, and comparing the new specimens with those available in Bombay.

## SYSTEMATIC LIST

*Note.* The scientific names are from Ripley's SYNOPSIS (1961) where available and his serial numbers are prefixed for convenience of reference. An asterisk on the left indicates that the bird has been seen or collected by me.

## BIRDS OF THE ANDAMAN AND NICOBAR ISLANDS

- [14. **Oceanites oceanicus oceanicus** (Kuhl) (South Georgia). Wilson's Storm Petrel.

Not listed from the area in the SYNOPSIS but recorded by Biswas from Andamans (1964). If this is with reference to Hume's observations between Preparis and the Cocos, repeated by Butler (1900: 151), it is too indefinite to be accepted.]

- [15. **Fregetta tropica melanogaster** (Gould) (Southern Indian Ocean) Duskyvented Storm Petrel.

Ferrar (1932) identified a storm-tossed bird as of this species, but added 'it had no white markings whatsoever barring the extreme bases of certain feathers being white'. As the bird was not preserved and this species has completely white underparts, except for a central dark line from chin to vent, there appears to have been a mistake in identification and the record is best dropped.]

17. **Phaethon aethereus indicus** Hume (Mekran Coast) Short-tailed Tropic-bird.

Hume (1874: 323) said he was informed that this species was often seen on the passage to and from the Andamans, especially in the monsoons, and in the neighbourhood of the Cocos. He added that Davison and others saw a *Phaethon* with a white tail over two feet in length at Treis (Nicobars), which was probably of this species.

Biswas (1964) has drawn attention to the omission of the Andamans from the known range of the species in Ripley's SYNOPSIS (1961).

Incidentally, Article 27 of the International Code of Zoological Nomenclature prohibits the use of a diaeresis which is used by Ripley in the SYNOPSIS for *Phaethon* and other names.

18. **Phaethon rubricauda rubricauda** Boddaert (Mauritius) Redtailed Tropic-bird.

Blyth (1846b: 374) refers to *P. aetherus* from the Nicobars as the only tropic-bird from the Bay of Bengal, and Hume (1874: 322) says the specimen was *rubricauda*. Listed from the Nicobars with a query in the SYNOPSIS but confirmed by Biswas (1964), though the evidence is not mentioned.

19. **Phaethon lepturus lepturus** Daudin (Mauritius) Longtailed Tropic-bird.

Tytler claimed to have shot a *Phaethon candidus* (Brisson) in the Andamans (Blyth 1863b). This was presumably the specimen examined by Hume (*Stray Feathers* 5: 498) and referred to as *P. flavirostris*, the Yellowbilled Tropic-bird. Both these names are now synonyms of this form.

21. **Pelecanus philippensis philippensis** Gmelin (Manila) Grey or Spotted-billed Pelican.

This species is listed from the Nicobars by Blyth (1846b & 1863b). Hume (1874: 324) states that Blyth's record was based on a specimen brought in by Capt. Lewis and says that it may well have come from Burma. Butler (1900: 150) was informed of a pelican seen at Port Blair after a cyclone. These records are omitted from the SYNOPSIS and I wonder if it would be worth while reviving them, as Biswas (1964) has done. In any case, the absence of suitable habitats for the bird would clearly indicate that they can only occur as accidental vagrants.

[24. **Sula sula rubripes** Gould (New South Wales) Redfooted Booby.

Hume (1874: 324) states: 'When out at sea about opposite Prepara on 4 March, and again when near the Cocos, we saw each time a pair of dusky boobies chasing flying fish; one pair passed within a short distance of the vessel, and I am pretty confident that they belonged to this species', i.e. *Sula fiber* Linn. The only Indian specimen known (in the British Museum) was collected in the Bay of Bengal (1929, FAUNA 6: 289, repeated in SYNOPSIS, p. 9).]

37. **Ardea purpurea manilensis** Meyen (Philippines) Purple Heron.

Davison and Hume obtained only one specimen but reported seeing it in the Andamans and the Nicobars (Trinkut and Tillangchong). Butler says it occurs in both groups but is rather scarce everywhere. Osmaston (1906a: 491) said it was not uncommon in open swampy places. It is not mentioned in the SYNOPSIS for this area (Biswas 1964).

[**Ardea sumatrana sumatrana** Raffles (Sumatra) Dusky Grey Heron.

Abbott and Kloss (in Richmond 1903) said they had not obtained specimens but seen it on Trinkut, Katchal, and Great Nicobar. This is omitted in the SYNOPSIS, not having been recorded from anywhere else within our limits.]

\*39. **Butorides striatus spodiogaster** Sharpe (Andamans & Nicobars)  
Little Green Heron.

1 ♂, 2 ♀♀ Betapur, M. A.

Several were seen in mangroves at Bakultala and Betapur, Middle

Andamans. In the Nicobars, Butler (1900: 153) said, they were so numerous that at low tide 20 or 30 could be counted at one time. The wings are smaller 157(♂) to 164(♀) against 167 to 171 mentioned in the FAUNA. Osmaston, Wickham, and Anderson are said to have taken many nests during May and June on various islands in mangroves 2-4, occasionally 8, feet above high tide. The eggs are smaller than in the Indian birds. A ♀ shot on 22 February had a slightly enlarged ovary.

Biswas (*Current Science* 28: 288, 1959) pointed out that Indian birds were different from *javanicus* of Horsfield (type loc.: Western Java) being paler, with longer moustachial streaks and longer wings (18 ♂♂ 174-184 mm., 6 ♀♀ 177-182 mm., against 3 ♂♂ 165-174 and 2 ♀♀ 166-174 in Java specimens) and used Bonaparte's name *chloriceps* with Hitaura, Chisapani, Garhi Province, Nepal, as type locality.

The Bombay collection contains 17 specimens, of which 7 ♂♂ and ♀♀ from Kutch (1), Bombay (5), and Ratnagiri (1) have wings 163-168 mm., average 165.2 mm. Five of these, and another from Ambala, Punjab, (wing 171), which are in comparable plumage, are as dark as those from the Andamans, though the latter in adult plumage differ in having more grey on the wing quills. Two larger (wings 175 and 184 mm.) and paler birds from Sandoway, Burma, and Darbhanga, Bihar, are presumably *chloriceps*.

It is apparent, as has been suggested by Biswas (loc. cit.), that the races occurring in India have still to be worked out.

\*42. *Ardeola grayii* (Sykes) (Dukhun) Pond Heron or Paddybird.

1 ♀ Wimberleyganj, S. A.

Said to occur in both the Andamans and Nicobars in the SYNOPSIS, but I have been unable to trace the latter record(s). Ball (1870a) admitted his record from Trinkut to be uncertain but, later (1880, p. 195), quoted this observation without reservation. Frequently seen in the Andamans but not so common as in most places in India.

A female obtained on 17th February has the wing 197 (FAUNA, 199-230)<sup>1</sup>; bill from gape 83 mm., from feathers 60 mm. (60-67), tarsus 56 (60-64), and tail 66 (73-84). These measurements show it slightly smaller than the Indian form and the markings on the head and neck are paler rufous than in others in the Bombay collection.

[43. *Ardeola bacchus* (Bonaparte) (Malay Peninsula) Chinese Pond Heron.

FAUNA 6: 355 and SYNOPSIS p. 14 state that it is found in eastern

<sup>1</sup> Except where otherwise appearing from the context, measurements in parentheses will be from Stuart Baker's FAUNA.

Assam, Manipur, East Pakistan, and the Andamans. The FAUNA key only refers to breeding plumage and the text says it is like *A. grayii* 'rather more brown and buff on the head and neck and rather deeper brown on the back and scapulars'. The measurements of wing, tail, tarsus, and culmen in the two species overlap to a large extent. In THE BIRDS OF BURMA, p. 532, it is stated that in non-breeding plumage this is not distinguishable from *grayii*. The only record I can trace is Sharpe, CAT. B.M. 26, p. 212, where a juvenile skin is listed from South Andamans. In the absence of any other record this may perhaps best be omitted.]

\*44. **Bubulcus ibis coromandus** (Boddaert) (Coromandel) Cattle Egret.

1 ♀ Choldhara, S. A. : wing 257 (240-260) ; bill from gape 83 mm., from feathers 60 (60-67) ; tarsus 56 (60-64) ; tail 66 (73-84).

Frequent in suitable open country. When disturbed, they formed flocks of 10 to 25 and flew together. None seen in breeding plumage either in November or on this trip.

Abbott and Kloss obtained an adult at Tillangchong, Nicobars (Richmond 1903 : 313). It is not mentioned for either place in the SYNOPSIS (Biswas 1964).

46. **Egretta alba modesta** (J. E. Gray) (India) Large Egret.

One was shot by General Stewart near Port Blair (Hume, *Stray Feathers* 5 : 347) but this is omitted in the SYNOPSIS.

I twice saw larger birds with *E. intermedia* in freshwater marshes, which were more likely to have been Large Egrets than the white form of *sacra*.

\*47/48. **Egretta intermedia intermedia** (Wagler) (Java) Middle Egret.

♀ North Button Island, Ritchie's Archipelago, Middle Andamans : wing 352 mm. (304-333, once 354) ; tarsus 132 [about 114 (once), 122-148] ; bill from gape 118 ; from feathers 97 [68 (thrice), 73-97 ; 118 (once)] ; tail 89.

Occasional. Twice seen with larger birds which were either *alba* or the white form of *sacra*.

Butler (1900 : 151) states that they occur in both groups, but he does not appear to have any evidence in addition to Hume's (1874 : 303) that, though he 'thought he saw it in the Nicobars, it is impossible to be certain'.

Dr. Sálím Ali informs me that he believes *palleuca* Deignan (North Siam) to be untenable, being based on a mistaken premise of bill colour.

**Egretta garzetta** subsp. Little Egret.

Tytler (Blyth 1863b) saw many, and Hume obtained 3 specimens from the Andamans. None were preserved from the Nicobars, where their

occurrence is doubted by Davison. Butler said they were more numerous than *intermedia* in the Andamans, and Osmaston (1906a : 491) saw flocks in South Andamans. It is omitted from both groups in the SYNOPSIS. I did not notice it though a careful watch was kept.

Hume said the Andaman birds were identical with birds from India, but Walden (*Ibis*, 1874c : 148) identified one obtained by Wardlaw Ramsay on South Andamans on 17 December as true *nigripes* Temm.; but this specimen is listed with *garzetta* by Sharpe (CAT. B. M. 26 : 122) along with others from the Andamans, and one from Trinkut, Nicobars.

As it is quite possible that the black-footed form from Sunda Islands extends to the Andamans and Nicobars, it may be well to leave the race as undetermined until fresh (or even the old) specimens are specifically examined for this character.

\*51 *Egretta sacra* (Gmelin) (Tahiti) Reef Heron.

1 ♂ Long Island, M.A. ; 1 ♂ Car Nicobar.

Frequent on rocky shores, occasionally several seen together when fighting to roost. No white forms certainly identified and a few large white egrets were seen in grass-covered snipe-land, where there would be greater probability of *Egretta alba* occurring. The legs are much shorter than in *asha* (*E. gularis schistacea*), and the tail almost touches the ground when sitting. The short tail and legs give it a curious *Pteropus*-like appearance when flying over. The Andaman bird which had enlarged testes is slightly darker and has a dark bill against a parti-coloured greenish-horny one in the Nicobar bird (both noted after drying). The white chin stripe in the Andaman bird is shorter (1¾ in.) than in the other (3½ in.). Both are paler than a ♂ *Demigretta asha* (*Egretta gularis schistacea*) from the Gulf of Kutch.

The stomach of one contained blennids, mud-skippers, and parrot fishes.

Butler (1900 : 151) refers to Port Blair birds nesting on the rocks and trees on Snake Island in Corbyn's Cove 3 miles away. On 14th May, he saw about 25 pairs of which only one pair was white.

Osmaston (1906a : 491) said they breed from April to June, chiefly on rocky islands, the nest consisting of a few sticks roughly put together and placed in some low bush or between rocks on the ground. The clutch is of two or three eggs.

	Wing	Tail	Tarsus	Bill from gape	Bill from feathers
Long Island ♂	278	90	66	95	75
Car Nicobar ♂	266	87	68	99	77
	(280-293)	(93-98)	(72-77)		

Hume (1874 : 304) quoted Von Pelzeln that three birds from the Nicobars are of small size with shorter bills and shorter tarsi, but com-

paring them with 39 specimens obtained from several places in the Andamans and Nicobars said that the distinctions would not hold good. He added that in white birds the dorsal plumes are rather more disintegrated than in ashy birds, some of them extending fully an inch beyond the end of the tail, which condition was not noted in any ash-coloured bird seen by him. Davison (loc. cit. : 309) said that the white form is more wary than the grey.

52. *Nycticorax nycticorax nycticorax* (Linnaeus) (Southern Europe)  
Night Heron.

Blyth (1846b) mentions it without comment, presumably having received a specimen from Mr. Barbe or Capt. Lewis. Davison (1874 : 315) saw several on the freshwater ponds of Trinkut Island (Nicobars) but did not obtain any. These records are omitted in the SYNOPSIS (Biswas 1964).

54. *Gorsachius melanolophus minor* Hachisuka (Katchal Is., Nicobars)  
Malay or Tiger Bittern.

This race has been described from the Nicobar Islands, but I have seen no refutation of Boden Kloss's statement (*Ibis* 1927 : 526-527) that it is not separable from the typical race from Western Sumatra. Hume obtained specimens at Tillangchong and Camorta.

56. *Ixobrychus cinnamomeus* (Gmelin) (China) Chestnut Bittern.

Butler (1900 : 153) said it was common in the Andamans, though Hume had only noted it at Tillangchong and Preparis in the Nicobars, and suggested that it had increased in numbers with the increase of paddy cultivation. He also took eggs in July. Osmaston (1906a : 491) found it common and took many nests between 25th June and 15th August. It is said to be less common in the Nicobars where Abbott and Kloss collected it at Camorta.

57. *Ixobrychus sinensis* (Gmelin) (China) Yellow Bittern.

Hume and Davison considered it uncommon but obtained specimens at Port Blair, Andamans, and Tillangchong, Nicobars. Another was obtained by Abbott and Kloss at Trinkut. Butler suggested that they had since increased in numbers.

Hume also referred to the birds being brighter coloured than any from India, but the matter does not appear to have received more attention later. These records are omitted in the SYNOPSIS.

\*88. *Dendrocygna javanica* (Horsfield) (Java) Lesser Whistling Teal.

Not seen on this trip, but 3 adults near 8 ducklings were noted at Diltamma Tank at Port Blair on 11th November. Butler said it was the common teal of the islands, numerous and resident near Port Blair.



and abundant on some of the Nicobars. One he shot on 26th June was about to lay. Osmaston (1906a : 491) found it fairly common near Port Blair and took three nests on the ground in August and September. Curiously, Davison said he did not meet it anywhere but in the Nicobars.

90. *Tadorna ferruginea* (Pallas) (Tartary) Ruddy Sheld-duck or Brahminy Duck.

Bayley-deCastro (1933) refers to a Brahminy Duck captured by a jailor at Port Blair, after a cyclone, in April 1922. There is no other record.

[94. *Anas crecca crecca* Linnaeus (Sweden) Common Teal.

Stuart Baker (*J. Bombay nat. Hist. Soc.* 12 : 251) said that Hume had excluded this from a number of places, but 'from these places must now be struck off the Andamans, Nicobars, and Malabar, in the latter place having been found frequently since GAME BIRDS was written'. This statement is repeated in INDIAN DUCKS AND THEIR ALLIES but I cannot find Stuart Baker's statement, which is mentioned by Butler, that this is based on reliable sight records. Bayley-deCastro (1933) also refers to its occurrence in the Andamans, but lists the Andaman Teal (*Nettion albobularis*) and the Oceanic Teal (*N. gibberifrons*) as two separate species! In the absence of any more definite information, I would drop it.]

\*96. *Anas gibberifrons albobularis* (Hume) (Andamans) Grey Teal.

2 ♂♂, 3 ♀♀ Betapur, M.A.

Only one party of 5 birds was seen on a tidal creek in the Middle Andamans. They appear very dark and inconspicuous when seated, either on a log in water or on the shore, but the white patches on throat, nape, axillaries, and wing coverts are conspicuous in flight, which is not unlike that of the Whistling Teal. Winged birds made very feeble attempts at diving. A crest which does not appear to have been mentioned was noticed in the bird in hand. Davison said that he had only heard them utter a low whistle, which was also apparently only uttered at night when feeding. Butler (*J. Bombay nat. Hist. Soc.* 11 : 332) and Osmaston (1906a : 491) have some notes on this species and the latter states that they nest in lofty and often dead trees, a clutch of 10 eggs being obtained at the top of a huge Padouk tree on August 4th. J. H. Williams in the THE SPOTTED DEER (1957, p. 220) refers to 'tens of thousands' on a freshwater lake on North Reef Island: 'The lake grew mottled brown with them. Thousands of others alighted on the tree-tops like starlings, scrambling over each other and flapping awkwardly to find a foothold.' He shot 20 couple and refers to iguanas (monitors) swimming out and making off with pricked birds.

There are other statements in the book which are rather startling from the natural history point of view. Osmaston (loc. cit.) states : ' it arrives at Port Blair in large numbers at the end of May and remains till October or November. In the winter months they frequent outlying freshwater jheels such as are found near Craggy Island, North Reef Island, Niell, the Brothers, Templeganj and other places '.

The northern population was separated by Fleming as *leucoparea* because of the large extension of white on the head and neck. But, as stated by Delacour (THE WATERFOWL OF THE WORLD, 1961, 2 : 77), this is irregular and varies individually. He adds : ' Such partial albinism is frequent in Ducks confined to a small island range and inbred . . . . . captivity-bred Andaman Teal showed various degrees of albinism which increased with inbreeding in successive generations '.

**Anas poecilorhyncha** subsp. Spotbill Duck.

Bailey-deCastro (1933) shot one in December 1927, after a cyclone, and this appears to be the only record.

114. **Nettapus coromandelianus coromandelianus** (Gmelin) (Coromandel) Cotton Teal.

Though not mentioned in the SYNOPSIS (Biswas 1964), this is a straggler into the Andamans, the records including Wardlaw Ramsay obtaining a single bird at Port Blair, and Capt. Wimberley a pair.

[133. **Milvus migrans govinda** Sykes (Dukhun) Pariah Kite.

Biswas (1964) has drawn attention to its occurrence in the Andamans, relying presumably upon 2 specimens shot by Tytler on Viper Island, near Port Blair. Hume (1874 : 150) expresses the opinion that these birds were carried down by a boat from Calcutta (as another was carried from Madras to Calcutta). I do not think that this conspicuous bird could have remained unnoticed and, as no one else ever noted it in the area, it should be removed from the list of Andaman and Nicobar birds.]

141. **Accipiter badius butleri** (Gurney) (Car Nicobar) Shikra.

(Colour plates of adult and juvenile male *J. Bombay nat. Hist. Soc.* 12 : 684).

Butler who found them in Car Nicobar while in search of *Accipiter soloensis* said that they keep almost exclusively to the tops of high trees, and have a shrill little double cry exactly like that of *Astur badius*.

142. **Accipiter badius obsoletus** (Richmond) (Katchal Is., Nicobars) Shikra.

The specimens obtained by Abbott had crimson irides against orange or yellow in *butleri* and its allies. Two stomachs contained insects and one lizard (Richmond 1903 : 307).

143. *Accipiter soloensis* (Horsfield) (Java) Horsfield's Goshawk.

A winter visitor to the Andamans and Nicobars (SYNOPSIS). Hume (1874, 2: 141) quotes Von Pelzeln that a young ♀ was killed on Car Nicobar, chasing an Oriole. Abbott and Kloss found it common in Katchal and on the Great and Little Nicobars (Kloss 1903: 128 and FAUNA 5: 153) obtaining 12 specimens. They suggest that Von Pelzeln's specimen may have been *A. butleri*. I cannot trace other records.

147. *Accipiter nisus nisosimilis* (Tickell) (Marcha, Borabhum) Sparrow Hawk.

Hume (*Stray Feathers* 4: 280) received a female killed in October by Capt. Wimberley in the Andamans. Biswas (1964) has drawn attention to its omission in the SYNOPSIS.

\*152. *Accipiter virgatus gularis* (Temminck & Schlegel) (Japan) Eastern Sparrow-Hawk.

♂ (wing 159) Wimberleyganj, S.A.; ♂ (150) ♀ (187) Betapur, M.A.

The FAUNA (5: 164) refers to eggs of *nisoides* Blyth (Malacca) being taken from February to April from old nests of crows in the avenues of Port Blair (probably from Wickham, *J. Bombay nat. Hist. Soc.* 19: 992). Osmaston (1906a: 488) took nests with: (a) 1 young and 2 eggs on the point of hatching and (b) 3 incubated eggs, on 24th and 27th April respectively. The second nest was conspicuous in a leafless tree and looked like a crow's nest but lined with green leaves. In the SYNOPSIS this race is synonymized with *gularis* but not mentioned for the Andamans and Nicobars, being said to be an occasional winter migrant as far west as Burma, East Pakistan, and India.

The first male is in immature plumage and differs from juveniles of *besra* Jerdon from the Palni Hills in: (1) having the feathers of the back unicolor and not edged with buff or rufous, (2) the mesial throat streak narrow, and (3) the breast being barred across and not marked with broad brown streaks.

Hume measured a ♂ wing 147 mm. (5.8 in.) and 2 ♀♀ 185 and 180 (7.3 and 7.1 in.). Stuart Baker has referred to the curious smallness of the males.

The first bird was taken in open country and looked very like a pigeon when going over. Davison (1874: 141) thought they were very rare and only noted them twice sailing in circles over gardens.

162. *Spizaetus cirrhatus andamanensis* Tytler (Port Blair, South Andaman Island) Crested Hawk-Eagle.

Several were seen circling over forest. In *Proceedings, Asiatic Society of Bengal*, 1865, p. 112, Tytler says it is found in mangrove forests and that he had found fish and crabs in them. Butler saw one

capture a myna and another a koel. Hume (1874:144) noted them at Great Coco.

\*173. *Haliaeetus leucogaster* (Gmelin) (Prince's Is., Indonesia) White-bellied Sea Eagle. -

Occasionally seen on seashore and in tidal creeks. One fully fledged brownish young, attended by parent seen on 12th February. The very distinctive *kak-kak-kak* call was not noticed. Hume (1874:143) found a nest 80 ft. up in a tree on Nancowry Island. Tytler (1867) saw it on Narcondam. Osmaston (1906a:488) reported nests on high trees on Craggy, Sir Hugh Rose, and the South Cinque Islands. Osmaston (1908:358) saw it on Barren Island. I saw a pair on Little Button Island, which were probably resident there. In November 1963, I saw a large brown bird with a pure white wedge-shaped tail and again on 1st March 1964 another large eagle with white underparts, a dark chin, and similar tail. The only other fishing eagle with a graduated tail is *albicilla*, but both were probably *leucogaster*.

It is also common along the sea-coast in the Nicobars (Abbott & Kloss in Richmond 1903:306).

[175. *Ichthyophaga ichthyaetus ichthyaetus* (Horsfield) (Java) Grey-headed Fishing Eagle.

Tytler is quoted by Blyth (1863b) as guessing at the identity of the sea eagle which flew over his house and which 'looked like *ichthyaetus* but was too far and high up to judge accurately'. Blyth suggests this may be correct as *humilis* (S. Müller). This was negated by Hume and was omitted until revived by Biswas (1964)\* and may perhaps be best ignored.]

[190. *Circus macrourus* (S. G. Gmelin) (Voronezh, southern Russia) Pale Harrier.

Ferrar (1932:449) refers to an immense number of Pale Harriers arriving at Port Blair in 1929-30: 'Every patch of rice had one of these birds over it.' They also arrived in Stewart Sound 90 miles north of Port Blair some time in November, and sat on fences and trees in great numbers, apparently exhausted. He states that, though conditions were excellent, he saw only 3 snipe where a record bag was made the previous season, and enquires if they could have been frightened away by the harriers. The following season was a fair one for snipe and no Pale Harriers were seen,

As no other observer has recorded this from the Andamans and Nicobars, it is probable that these notes refer to Montagu's Harrier (*C. pygargus*) and it may not be worth while adding this to the avifauna, though the observations are interesting.]

191. *Circus pygargus* (Linnaeus) (England) Montagu's Harrier.

Butler (1899: 685) saw an immature bird in May which he thought was of this species. He later found a skeleton which was too small for *aeruginosus* and which may have been of this too.

Osmaston (1906a: 488) says they are common in the open country around Port Blair, from November to March.

Biswas (1964) refers to the omission of the Andamans from its range in the SYNOPSIS.

\*193. *Circus aeruginosus aeruginosus* (Linnaeus) (Sweden) Marsh Harrier.

Davison (1874: 150) refers to a pair of young birds at Aberdeen, Port Blair, in May; Butler saw it several times, and Osmaston (1906a: 488) said it was less common than Montagu's, but apparently frequently seen. I saw an adult in November 1963.

It is omitted for the Andamans in the SYNOPSIS (Biswas 1964).

\*200. *Spilornis elgini* (Blyth) (South Andaman Island) Dark Andaman Serpent Eagle.

1 ♀ Mannarghat, S. A.

\**Spilornis cheela davisoni* Hume (South Andamans) Pale Andaman Serpent Eagle.

2 ♀♀ Pochang, S. A.; Bakultala, M. A.

A pale and a dark form of serpent eagle occur in the Andamans. The dark form was first named *elgini* by Blyth in 1863 and the pale form separated as *davisoni* by Hume in 1873. Stuart Baker accepted the pale *davisoni* as a race of *Spilornis cheela* restricted to the Andamans and kept the dark *elgini* as a separate species described from South Andaman Island, and said to occur in both the Andamans and Nicobars (FAUNA 7: 686), though Hume (1874: 147) specifically stated that it had not been seen in the Nicobars. The 3 specimens obtained in the Andamans are all females, two pale and one dark (Mannarghat). Both the pale birds have the wing 393 mm. (374-407) against 380 (344-368) in the other, more yellowish legs and feet, which appear coarser and stouter than in the dark *elgini*, but the other differences regarding the scales on the tarsus and the papillae on the soles (Hume, loc. cit.: 148) are difficult to confirm. Ripley (SYNOPSIS: 62) combines the pale and dark forms in the Andamans and synonymizes *davisoni* with *elgini*. If Ripley's interpretation is correct, the Nicobar record [presumably the one specimen in the British Museum referred to by Blanford (2: 362)] would be either a straggler from the Andamans, or evidence that the trend to dimorphism is shared by the subspecies inhabiting the Nicobars too.

Light and dark birds were seen at the same camp but, in the several pairs glassed, both were always of the same kind. The last bird shot on

22nd February was one of a pair and had three enlarged follicles in the ovary. All were obtained before noon and had empty stomachs. Often seen in mangrove forests.

Osmaston (1906a : 488) saw one capture an eel about a foot long in shallow water.

Butler (1899 : 684) thought that birds shot along the mangrove creeks feeding on crabs were nearly always pale, while those shot on clearings etc. more inland were usually *elgini*. My three specimens were obtained exactly under these circumstances !

With the little evidence that I have seen, I am inclined to the view that *elgini* and *davisoni* are two separate species.<sup>1</sup>

201. *Spilornis cheela minimus* Hume (Camorta, Nicobar Islands)  
Serpent Eagle.

Butler (1899 : 685) saw it on Teresa and Katchal Islands.

Richmond (1903) refers to specimens from Camorta and Katchal and records that Abbott & Kloss also saw it on Trinkut and Little Nicobar. In the SYNOPSIS the island of Nancowry is added to this range. The male wings measured 256.5-284.5 mm. and the female 288-292 mm. The stomachs of the three specimens contained remains of lizards, portions of a small fowl and a small crab (Richmond, loc. cit.). Gurney (*Ibis* 1878 : 102) refers to the considerable prolongation of the hooked point of the upper mandible.

202. *Spilornis cheela klossi*\* Richmond (Pulo Kunyi, Great Nicobar Is.) Serpent Eagle.

In the SYNOPSIS, the distribution is given as the Great Nicobar and southern Nicobar Islands, while Richmond stated that it was found on Great Nicobar only. The stomachs of the birds obtained by Kloss contained remains of lizards, rats, a small bird, and an Emerald Dove.

[*Microhierax latifrons* Sharpe

Blanford did not admit this to the Nicobar list as both the records (*Stray Feathers* 8 : 496) and *Ibis* (1881 : 274) were based on specimens obtained from a dealer.]

\*203. *Pandion haliaetus haliaetus* (Linnaeus) (Sweden) Osprey.

At Betapur, Middle Andamans, I twice saw this bird in a tidal creek, and later another on the sea-side diving and splashing into the water in typical osprey style. I do not think there is much room for doubt in this identification, which adds this species to the avifauna of

<sup>1</sup> Dean Amadon (1964, Taxonomic notes on Birds of Prey. *Amer. Mus. Novit.* No. 2166) treats *davisoni* as a race of *cheela* and *elgini* as a separate species.

<sup>2</sup> Dean Amadon (loc. cit.) treats this as a separate species.

the area. In view of the few records of this species nesting in Indian limits, it may be worth noting that Jim Corbett in THE TEMPLE TIGER (1957) page 96 states that it nested for many years on the same tree in the Sarda River on Kumaon-Nepal border.

209. *Falco peregrinus japonensis* Gmelin (off Japan) Peregrine Falcon.

Winter straggler. Hume (1874 : 140) saw a pair on Preparis Island and Col. Tytler on Ross Island. General Stewart shot one at Port Blair which was recorded as *peregrinus* (Hume 1876 : 279). In the SYNOPSIS *japonensis* is said to occur but I do not know if a specimen was examined.

211. *Falco peregrinus peregrinator* Sundevall Shahin.

The type specimen was taken at sea in latitude 6°20'N. between Ceylon and Sumatra, 70 Swedish miles off the Nicobars. The mileage is converted into 'about 700 English miles' in the SYNOPSIS, but this is doubtless in error, for Ball (1873 : 52) also refers to 70 miles. One collected by Abbott at Kamorta in February (Kloss 1903 : 97) is listed by Richmond (1903) as *Falco peregrinus* Tunstall. Dr. Dillon Ripley tells me (*in epist.*) that it appears to be a small male of this race: wing 310 [265-295 (one 339)], though its general tone of coloration is rather paler than normal for this form.

*Falco tinnunculus* subsp. Kestrel.

Biswas (1964) refers to the occurrence of '*tinnunculus/interstinctus*' in the Andamans being overlooked in the SYNOPSIS. From a subsequent letter I understood that he was not able to verify either race but meant an alternative identification, presumably Butler's (1899 : 687) mention of a Capt. Orchard seeing 'an unmistakable kestrel hovering ..... at Port Blair in October'. I wonder if such a record, unsubstantiated by anyone else before or after, is worth retaining.

225. *Megapodius freycinet nicobariensis* Blyth (Nicobar Is.) Megapode.

Islands of the Nicobar group (except Choura and Car Nicobar) lying north of Sombrero Channel (SYNOPSIS). Hume (1874 : 72) refers to the stomach of one shot at Tillongchong containing 'a good deal of sand, fragments of quartz and specimens of *Scarabus plicatus* and *Helicina zelebori*'.

Hume (*loc. cit.* : 114) refers to Mr. Hawkins, the lighthouse keeper at Table Island (at the northernmost end of the Andamans), describing a 'brown hen-like bird which he occasionally shot and which although it may have been merely one of the wild [? feral] hens from the neighbouring Cocos, still, from what he said of the large feet and red

skin about the face, seemed to savour strangely of the Megapod, and this suspicion gains strength from the fact that on the western shore of the island . . . . . I came upon a mound, which in every respect resembled, so far as external appearance went, the mounds that I so closely examined in Galatea Bay'. Pollok (1879, 2 : 16) refers to 'one of the Megapodidae' being shot on Great Coco.

C. Boden Kloss (1903, footnote p. 328) says that the megapode also occurs in the Cocos presumably referring to these statements, and suggests that it has either been introduced by Malays or been eliminated from the Andamans by the introduction of the civet (*P. tyleri*).

Abbott notes (Richmond 1903 : 311) that their eggs are excellent when fresh and excrement very foul. Butler (1899 : 692) and St. John (*J. Bombay nat. Hist. Soc.* 12 : 212) have notes on the nests and eggs. Hume describes the call as a cackling *kuk-a-kuk-kuk* quickly repeated.

226. **Megapodius freycinet abbotti** Oberholser (Little Nicobar Island)  
Megapode.

Restricted to Great and Little Nicobar Islands.

\*246. **Francolinus pondicerianus pondicerianus** (Gmelin) (Pondicherry, India) Grey Partridge.

This was introduced at Port Blair in about 1890 (Butler 1899 : 691) and has established itself within the immediate vicinity, where the forest has been removed and treeless, grass-covered hill-tops remain. At Haddo, Port Blair, birds may be heard calling within city limits and also seen from the Government Guest House. Shooting is prohibited, but they have not spread very far. I am recording the race as mentioned in the SYNOPSIS.

254. **Coturnix chinensis trinkutensis** (Richmond) (Trinkut Is., Nicobar Group) Bluebreasted Quail.

Only one specimen was collected by Abbott & Kloss and examined by Richmond (1903), though they reported it as 'common in open grasslands of Trinkut and Camorta'. Butler also found it common on Car Nicobar.

\*311. **Pavo cristatus** Linnaeus (India) Common Peafowl.

This was introduced on Ross Island (opposite Port Blair) around 1868, where Hume in 1873 reported them as having thriven, though introduction on the mainland (South Andaman) had not been successful. Pollok (1879, 1 : 33) stated that hybrids between Indian and Burmese (*muticus*) peafowl were common at Port Blair. Peafowl disappeared during the Japanese occupation (1940s) but some more have been introduced by the present administration. I saw 5 or 6 birds in November 1963 which were not wild and would perhaps be best described as 'domesticated'.



**Turnix tanki** subsp. Button Quail.

Hume (1873 : 310) referred to a single indifferent specimen similar to *maculosus*, with a perfectly white abdomen, for which he suggested the name *albiventris*. Later (1874 : 281-283) he preferred to leave it with *joudera* Hodgs. (= *tanki*) and said it was rare in the Andamans but not uncommon on Camorta, Nicobars. Again (*Stray Feathers* 4 : 293), he said that other specimens which had come to hand left little doubt as to its distinctness 'though it must be admitted that the name was not happily chosen'. This was accepted in Blanford's FAUNA (4 : 150) where the description reads : 'Back in adults with bold black and rufous markings, while in *tanki* the back in adults is brown, with slight black vermiculations ; rufous confined to collar'. Stuart Baker merged it with *tanki* and thus it has remained since. Butler (1899 : 693) found it common in areas with undulating plains of grassland on Teressa, Camorta, and Car Nicobar. Seymour Sewell (1922, p. 980) found their crops invariably full of grass seeds.

\*330. **Rallus striatus obscurior** (Hume) (Andamans) Bluebreasted Banded Rail.

Osmaston (1906a : 489) said it was very common in the Andamans and that it did not readily rise and had a very heavy flight. He found a number of nests on swampy ground, well concealed and with up to six eggs, between 15th June and 15th August.

I got only one glimpse of a rail in South Andaman, which was probably this species.

Butler (1899 : 694) said it was common on both groups and that it bred more or less throughout the year, but added : 'I have known of nests in June, July and November in the Andamans and took a nest in Car Nicobar on 30th August. I also caught several very small chicks of this species in September and October'. He caught several in thick jungle in traps set for *E. canningi*, and said the note was a deep croak, very like that of the Chestnut Rail. When caught, the chicks kept up an incessant plaintive call note, half whisper and half whistle.

Hume (1875 : 389) described the young of this form as *Hypotaenidia abnormis*.

\*333. **Rallina canningi** (Blyth) (Port Canning, Andamans) Andaman Banded Rail.

At Wrightmyo, a pair of rails, which appeared almost red, rapidly scuttled from a stream in evergreen and disappeared into the undergrowth. The bush-policeman said they were responsible for the deep low booming heard several times in heavy forest, a call which was more suggestive of a pigeon. The single specimen of the pigeon *Caloenas* was obtained in the same patch and I am unable to express any opinion.

Butler (1899 : 695) snared 80 within a square mile in 2 months. The call, he says, is 'a curious deep croak, sounding something as if a man were trying to say *kroop! kroop!* with his mouth under water. The alarm call uttered by a snared bird when approached is a sharp *chick!* *chick!* and when caught it sometimes utters a cry rather like that of a wounded rabbit'. He added : 'it fed principally on beetles, grasshoppers, worms, small snails, caterpillars etc. In the case of large grasshoppers the prey is held in the bill and shaken as a terrier would do a rat, flung down, pounced on, and worried again until nearly dead and then swallowed.' The plumage of young birds and the colours of their soft parts are also noted.

337. *Porzana pusilla pusilla* (Pallas) (Dauria) Baillon's Crake.

Davison obtained a single specimen at Port Mouat and Butler another. These are overlooked in the SYNOPSIS (Biswas 1964).

\*345. *Amaurornis phoenicurus insularis* Sharpe (Andamans) White-breasted Waterhen.

1♂ Wrightmyo, S.A.

\**Amaurornis phoenicurus leucocephalus* Abdulali (Car Nicobar) Whiteheaded Waterhen.

1♀ Car Nicobar.

After I had described the latter race (1964), Mr. W.W.A. Phillips kindly examined the material at the British Museum. He states that birds from both the Andamans and the Nicobars show more white on the head than those from India, but in his opinion there is no justification for separating the Nicobar birds from the Andaman race. It would appear that a closer examination of additional material is necessary.

This species was quite often seen or heard either in mangrove or near a stream. On 13th February at dusk, a pair 10 feet up in trees 20 yards apart appeared to be *tuk-tukking* to each other. The ♂ shot on 11th February had the gonads undeveloped. Osmaston (1906a : 490) took many nests, usually with 4 eggs in June and July.

It appears to be widely distributed, having been reported from many places both in the Andamans and Nicobars, and also from the hot springs on Barren Island (Richmond 1903).

\*346. *Gallicrex cinerea cinerea* (Gmelin) (China) Water Cock or Kora.

Davison saw it in sugarcane fields and Butler noted two or three.

We put one up out of grass near water in paddy fields at Wimberleyganj, S. A., and Bakultala, M. A.

\**Gallinula chloropus orientalis* Horsfield (Java) Malay Moorhen.

1 ♂? Port Blair, S. A.

One specimen was shot and skinned by Maxie Young near Port

Blair on 6th March 1964. It differs from others in the Bombay collection by its bright red frontal shield extending backward as far as a vertical plane passing through the eyes. The wing measures 170 mm. and the bill from gape 30 mm. Dr. Ripley has identified this bird as *G. c. orientalis*, which is an addition to the Andaman and Indian avifauna.

365. *Vanellus cinereus* (Blyth) (Calcutta) Greyheaded Lapwing.

Mentioned in Blanford's FAUNA as occurring in the Andamans, probably on the strength of the single specimen from Port Blair shot by Gen. Stewart (Hume, *Stray Feathers* 5 : 347).

371. *Pluvialis squatarola* (Linnaeus) (Sweden) Grey Plover.

Hume (1874 : 287) observed several in MacPherson's Strait and Davison secured one at Port Mouat, South Andamans. These records are omitted in the SYNOPSIS as noted by Biswas (1964).

\*373. *Pluvialis dominica fulva* (Gmelin) (Tahiti) Golden Plover.

1 ♂? Wrightmyo, S. A.; 1 ♂, 1 ♀ Car Nicobar, 13th March.

Hume (1874 : 288) said they had been shot in every month from December to May, and again in June, July, and September, but none were in breeding plumage. Butler also shot what he believed were immature birds in June. I saw a party at the Port Blair aerodrome in November 1963, and during February-March they were often seen, usually in small parties in drying paddy fields, snipe grounds, mangrove creeks, hockey grounds, and rocky sea-shore. Also, on 7th March on Car Nicobar where Shekar obtained specimens on 13th March.

3 birds: wings 165 (2), 171 (♀) mm. against measurements of 160-165 in the FAUNA. THE HANDBOOK OF BRITISH BIRDS indicates 165-174.

\*374. *Charadrius leschenaultii leschenaultii* Lesson (Pondicherry) Large Sand Plover.

Hume, Ramsay, Butler, and Osmaston noted it and obtained specimens in the Andamans and/or Nicobars. As pointed out by Biswas (1964), these records are overlooked in the SYNOPSIS.

I think I saw a pair at Chiria Tapoo, South Andamans, on 15th February.

377. *Charadrius asiaticus veredus* Gould (Northern Australia) Sand Plover.

Ball's record from the Andamans, a male in winter plumage shot by Dr. Dobson in May (1872 : 288), still remains the only one of this race from Indian limits, two of the typical form having been taken at Vengurla (west coast south of Bombay) and in Ceylon.

379. *Charadrius dubius curonicus* Gmelin (Kurland) Little Ringed Plover.

Davison (1874 : 290) obtained a specimen with a  $4\frac{1}{2}$  in. (114 mm.) wing at Aberdeen, South Andamans, and Hume saw it on the Coco and Preparis Islands. Ramsay also obtained specimens in South Andamans (Walden, 1873 : 316) and Butler saw it at Port Blair. I saw Ringed Plovers near Port Blair in November and again on the creek at Betapur, Middle Andamans, on 24th/25th February. The Andamans have been omitted from the range of this species in the SYNOPSIS (Biswas 1964).

\*384. *Charadrius mongolus atrifrons* Wagler (Bengal) Lesser Sand Plover.

1 ♀ Choldhari, S. A.; 2 ♀♀, 1 ♂? Car Nicobar.

This species was common, being seen quite often in tidal creeks and near the sea. Also seen with a party of turnstones in a field a hundred yards from the sea at full tide. Hume (1876 : 293) received skins of what he thought were young birds obtained in May, July, and September, but as stated in the FAUNA (6 : 174) it is unlikely that it breeds here. Ramsay (Walden 1873) got it in South Andamans. The four specimens are more worn and greyer than others in Bombay, and the forehead also purer white, but Dr. Ripley to whom specimens were sent identifies them as of this race.

\*385. *Numenius phaeopus phaeopus* (Linnaeus) (Sweden) Whimbrel.

1 ♂, 2 ♀♀ Long Island, M. A.; 1 ♀ Car Nicobar.

Hume and Walden noted them in the Andamans and Nicobars and Hume thought that they did not differ from those found in England. Abbott & Boden Kloss obtained specimens in the Nicobars, but they were not racially identified by Richmond. Biswas (1964) had drawn attention to the omission of these records in the SYNOPSIS.

I found it quite common in suitable localities in South and Middle Andamans, and Shekar obtained it at Car Nicobar. All our specimens (4) are dusker above than any of the specimens available in Bombay, which all show a more spotted appearance. One of my specimens was sent to Dr. Ripley for subspecific identification, who has identified it as of the typical race. The bills measure : 3 ♀♀ 84-96, avg. 90 ; 1 ♂ 80.

Curiously the 8 specimens in Bombay are all males.

One contained remains of the crab *Thalamita crenata* (Latrielle), and another of *Sesarma longipes* Krauss.

\*388. *Numenius arquata orientalis* C.L. Brehm (East Indies) Curlew.

Birds from the Nicobars were identified as *lineatus* (now synonymized with *orientalis* C. L. Brehm) by Herr Von Pelzeln (Ball 1873 : 85).

Hume (1874 : 296) refers to two specimens from Port Blair obtained on 16th August and 24th September (both rather early dates for winter migrants so far south), one a female excessively pale and the other a male excessively dark. He adds : 'Both are slenderer and smaller than any specimens of *lineatus* I have ever seen. The male, long as is his bill, is scarcely bigger than a Whimbrel.'

Though I have an impression that I saw several, I have specific record only for one seen on Long Island on 27th February. This species is omitted from the Andamans and Nicobars in the SYNOPSIS (Biswas 1964).

\*394. *Tringa totanus eurhinus* (Oberholser) (Tso Moriri Lake, Ladakh)  
Redshank.

1♀ Choldhari, S.A. ; 1♂ Long Island, M.A.

Davison (1874 : 299) noted this bird as common from the first week in September to 5th May, along the salt-water creeks and mangrove swamps, also perching among the mangroves at high water. One was also shot in June. Walden (1874c : 147) also refers to specimens from Port Blair on 31st May and 12th July. Pelzeln (Ball 1873 : 85) noted it in the Nicobars.

I saw it in November and several in South and Middle Andamans during February. I cannot racially identify the specimens I obtained, but Richmond names one collected by Boden Kloss at Kamorta in February 1901 as *eurhinus* and I am leaving all under this name.

Biswas (1964) has drawn attention to the omission of this species from the Andamans and Nicobars in the SYNOPSIS.

\*396. *Tringa nebularia* (Gunnerus) (Norway) Greenshank.

Hume (1874 : 299) did not obtain it and only referred to a doubtful record by Von Pelzeln in the Nicobars.

I saw it at Port Blair in November and at Bakultala, Middle Andamans, on 22nd February.

\*397. *Tringa ochropus* Linnaeus (Sweden) Green Sandpiper.

I saw one in November and Butler said it appeared scarce though he shot one or two during the season.

\*398. *Tringa glareola* Linnaeus (Sweden) Wood Sandpiper.

Hume said they were not common but Davison met it occasionally around Port Blair and, though he did not see it in the Nicobars, he got it at Acheen, North Sumatra. His three specimens from Port Blair were killed in the first week of November.

I saw a single bird on 11th and several on 14th February.

- \*400. *Tringa terek* (Latham) (Terek River on Caspian Sea) Terek Sandpiper.

1♀ Betapur, M.A.: wing 132; bill 49 mm.

Hume recorded it as common in the neighbourhood of Port Blair, and added that specimens killed as late as mid-April showed no signs of their breeding plumage. Davison saw large flocks in the creeks and noted them as settling on the mangroves at high tide. I shot one out of a party of 10 to 12 on an island at Betapur, where they had settled with some *Charadrius mongolus*.

As in other shore birds the fresh skin appears more grey and less brown than the older ones.

- \*401. *Tringa hypoleucos hypoleucos* Linnaeus (Sweden) Common Sandpiper.

Common everywhere near water. At Betapur, while punting up the creek at dusk, we saw many single birds, and also twos and threes, flying towards the mouth of the creek, presumably to roost together. Davison found them present on 12th May and Hume noted the first returned bird as obtained on 24th August. Osmaston (1906a: 490) has almost identical dates. Butler records a slightly wounded bird swimming hither and thither, two feet under water. I saw it on Car Nicobar.

- \*402. *Arenaria interpres interpres* (Linnaeus) (Sweden) Turnstone.

1♂ Choldhari, S.A.

Hume noted it on many islands in the Andamans and Nicobars, the last on 29th April in almost full breeding plumage. His seven specimens were all females. Butler found them still abundant in May at Port Blair and again in the Nicobars in September.

I shot one out of a flock mixed with Lesser Sand Plovers on South Andaman and also noted it on North Button Island in Ritchie's Archipelago.

The tail measurements 76-79 mm. in the FAUNA (5: 155) are in error and should be nearer 55.5 to 61.5 mm. (THE HANDBOOK OF BRITISH BIRDS, 1945, 4: 224).

- \*406. *Capella stenura* (Bonaparte) (Sunda Islands) Pintail Snipe.

♂ Bakultala, M.A.

This is the common snipe of the Andamans, and Ferrar (1932) cites a bag of 50½ couple to two guns. Hume and Butler state that it is common from September to early May, and Hume refers to two each in June and July. In February I found them common in suitable localities which were few and appeared to be drying up. J. Miles Stapylton (*J. Bombay nat. Hist. Soc.* 36: 507 and 37: 491-2) recorded them on 28th August, and Bayley-deCastro (1933) said that they were

invariably present by the middle of August and that he had also seen them on 25th July. One wonders, as did Ferrar, whether they leave the island, or find their food in mangroves, and fern (*Asplenium acerifolium*) swamps as the fresh water dries up. Hume also saw it in the Nicobars, though this is overlooked in the SYNOPSIS (Biswas 1964). In flight, the bird appeared darker and slower than the fantail and I thought that in flight it held its bill nearer the vertical creating a more compact profile.

[407. *Capella megala* (Swinhoe) (Between Takoo and Peking, China)  
Swinhoe's Snipe.

Bayley-deCastro (1933) refers to one shot in the Andamans, but his omission of the Fantail Snipe (*C. gallinago*) and some other errors in his note indicate caution in accepting this record, though it occurs in small numbers in eastern India, south into Ceylon.]

408. *Capella media* (Latham) (England) Great Snipe.

Bayley-deCastro (1933) stated he twice shot Great Snipe, weighing  $7\frac{1}{4}$  and  $7\frac{3}{4}$  oz., 'behind the butts of the rifle range.' This record is omitted from the SYNOPSIS.

\*409. *Capella gallinago gallinago* (Linnaeus) (Sweden) Fantail Snipe.

Hume, Butler, Osmaston, and Ferrar all refer to the rarity of this species in the Andamans, Butler stating that there was not one of this species among the 300 odd birds he shot during the season.

In mid-February I shot and handled a dozen snipe at three separate places, and they included four fantail.

410. *Capella minima* (Brünnich) (Denmark) Jack Snipe.

This has been recorded once from the Andamans, being the first snipe shot by Lt. H. Turner on 25th November 1896 (Finn, *J. Asiat. Soc. Bengal* 46, Part II, No. 2 : 525).

413. *Calidris tenuirostris* (Horsfield) (Java) Eastern Knot.

Wardlaw Ramsay obtained a specimen near Port Blair (*Stray Feathers* 4 : 294).

415. *Calidris ruficollis* (Pallas) (Southern Transbaikalia) Eastern Little Stint.

This is noted from the Andamans and Nicobars (SYNOPSIS). Hume (1874 : 298) identified 12 specimens from this area as *minuta* and objected to Lord Walden naming a bird collected on 24th January as *ruficollis* as it was not possible to tell them apart in winter plumage. Stuart Baker (6 : 236) said that it was possible to separate *ruficollis* by its larger size. Butler later refers to *ruficollis* as fairly

common along the Andaman and Nicobar coasts in winter, seeing them up to the end of May. Osmaston (1906a : 490) also shot one at Nadakachang Swamp, Andamans, in January.

416. *Calidris minutus* (Leisler) (Germany) Little Stint.

Taken from December to June in the Andamans and Nicobars (Hume 1874 : 298). This is not mentioned as occurring in this area in the SYNOPSIS.

418. *Calidris subminutus* (Middendorff) (Stanovoi Mountains and mouth of the Uda) Longtoed Stint.

Butler says: 'I believe I shot the Longtoed Stint at Port Blair, but cannot find it among my notes'. Osmaston (1906a : 490) shot one in the Andamans in March. Biswas (1964) draws attention to its omission from this area in the SYNOPSIS, and also to a doubtful record from the Nicobars (?).

422. *Calidris testaceus* (Pallas) (Holland) Curlew-Sandpiper.

Davison and Butler record it both from the Andamans and Nicobars from September to April and refer to specimens taken in June and July. These areas are omitted from the SYNOPSIS (Biswas 1964).

*Limicola falcinellus* subsp. Broadbilled Sandpiper.

Davison and Butler record it from both the Andamans and the Nicobars from September to April, and refer to specimens in June and July. These areas are omitted from the SYNOPSIS (Biswas 1964).

\*434. *Dromas ardeola* Paykull (India) Crab Plover.

1 ♀ North Button Island.

Hume (1874 : 293) collected 4 specimens in the Andamans and considered it rare. Osmaston (1906a : 490) said they were not common but saw 60 or 70 on Baratang Island. Butler saw a flock of 60 or 70 birds on a long low reef exposed by low tide at Car Nicobar. Abbott saw them at Katchal and Great Nicobar. I saw pairs on North and Middle Button Islands.

The specimen from North Button Island has the wing 213 mm. (FAUNA, 201-210); bill 59 (54-56); tail 75 (65-75). My measurements of the wing and bill agree with those noted by Hume. Hume (loc. cit.: 62) records that one had fed entirely on the crab, *Gonodactyla chiragra*.

\*438. *Esacus magnirostris magnirostris* (Vieillot) (Australia) Great Stone Plover.

1 ♀ North Button Island.

Hume (1874 : 293) obtained it at Great and Little Coco and at Corbyn's Cove, a few miles south of Port Blair, taking eggs at Little



Coco and Corbyn's Cove. M. Boning took eggs in April (FAUNA 6: 82). Osmaston (1906a: 490) said that one or more pairs frequented the shore of almost every island.

We saw three birds on North Button Island together with the Crab Plovers, and again on Middle Button. The stomach of the specimen contained pieces of shells. The ovaries were granular, wing 273 mm., bill 79, and tarsus 80 mm.

This species has not been recorded from the Nicobars, though the same race is said to occur again on the coasts and islands of Malaya, and further to Australia. The skin obtained by me was sent to Dr. D. L. Serventy of the Western Australian Regional Laboratory, Perth, for examination. He confirms that it is identical with those from Australia and concurs with recent studies on this species that no new race should be recognized.

443. *Glareola pratincola maldivarum* J. R. Forster (Open sea in the latitude of Maldive Islands) Collared Pratincole.

Said to occur occasionally as a migrant in the Andamans and Nicobars (Hume 1874: 286). Osmaston (1906a: 490) shot one of a pair at Nadakachung Swamp early in March. It is omitted in the SYNOPSIS for the Andamans and Nicobars, though there are specific records of *G. orientalis* Leach, from the Coco Islands and South Andamans (Walden 1874c: 146).

459. *Chlidonias leucoptera* (Temminck) (Mediterranean) White-winged Black Tern.

Obtained by Mr. de Roepstorff in South Andamans (Blanford, FAUNA 4: 308).

461. *Gelochelidon nilotica affinis* (Horsfield) (Java) Gullbilled Tern.

The only record from the Andamans and Nicobars appears to be a 'rather small young female, the primaries very dark', wing 292 mm., obtained by Capt. Wimberley in South Andamans in November (*Stray Feathers* 4: 294).

\*466. *Sterna dougallii korustes* (Hume) (Andaman Islands) Roseate or Rosy Tern.

1 ♀ North Button Island: wing 218 mm.

On 29th February, I shot one of this species out of a large flock of *S. sumatrana* (q. v.) on North Button Island. Both species have a strikingly beautiful rosy tinge on the breast but, while there are other differences, my attention was drawn to this bird by its red legs and feet compared to black in the other.

Butler also did not find it as common as the Blacknaped Tern, and said that it disappeared from Port Blair after breeding.

\*468. *Sterna sumatrana sumatrana* Raffles (Sumatra) Blacknaped Tern.

3 ♂♂, 6 ♀♀ North Button Island.

On 9th February, while between North Sentinel and the west coast of South Andamans, I saw a large flock of some 200 terns wheeling about over the sea in close formation. They often broke up into two or three flocks, but re-joined and flew around in large irregular circles, high and low over the sea, but too far away for me to identify. Later, on 29th February I saw many similar terns, longwinged, white, and flying close to each other in parties of 5 to 15 and collecting (c. 500) on a sandpit on North Button Island. Specimens obtained (10 to 2 barrels!) were of this species, all with black legs and feet and bills. On closer examination the bills were noticed to have small yellow tips about 16 mm. in length. Nine sexed (3 ♂♂, wings 215, 216, 227; 6 ♀♀, wings 208-224, avg. 213) showed no sign of breeding. As was noted by Hume, the males have larger bills, 36 mm. against 33-34 in females.

Blyth (1846b) said it bred abundantly in the Nicobars. Butler said it arrived at Port Blair in numbers at the end of April, bred in the neighbourhood, and was hardly seen anywhere after September. Osmaston (1906a : 491) said they frequented the more sheltered east coast during the south-west monsoon (May to October) and the west coast for the remaining six months. They bred on the small rocky islets off the east coast from May to July, laying one or two eggs.

\* *Sterna anaethetus* subsp. Brownwinged Tern.

10? Ross Island, S.A., 13 November 1963.

On 13th November, I picked up one dying on Ross Island, South Andamans. Except for the smaller size, wing 246, bill 40, tail 127, I can find no other character by which I can separate this from specimens marked *fuscata*.

Blyth (1863b) refers to a specimen from the Andamans, and Butler calls it a straggler to the Andamans during the winter months. He also noted some which hung around Port Blair for a few days after rough weather in November. It is significant that he does not refer to *Sterna fuscata* (q.v.) at all.

474. *Sterna fuscata nubilosa* Sparrman (India Orientalis) Sooty Tern.

Breeds in the Andamans (SYNOPSIS). Though Stuart Baker (FAUNA 6 : 144) refers to its occurrence in the Andamans, I cannot trace the original record nor that of its breeding there.

\*479. *Sterna bengalensis bengalensis* Lesson (Coasts of India) Lesser Crested Tern.

2 ♀♀ North Button Island, M.A. : wing 290, 280 ; bill 52, 54 ; tail 112, 110 ; tarsus 23 (2).

I shot two out of a large party of terns, mostly *sumatrana*, on North Button Island on 29th February, both females. Davison got 3

specimens (all females) on the north coast of Camorta, Nicobars (1874 : 318). The soles of the feet of one of my specimens were bright yellow all over (including webs) and only under the toes in the other. Their bills, first noted as bright yellow, were orange on the following day.

This species has also been recorded in Nicobars (Blyth 1846b, and 1863b) but is not mentioned for either the Andamans or Nicobars in the SYNOPSIS.

481. **Anous stolidus pileatus** (Scopoli) (Philippines) Noddy Tern.

Blyth listed it from the Andamans on the basis of a specimen in the Indian Museum (1863b). Hume (1874 : 321) did not obtain it but he refers to several specimens from the Andamans in Col. Tytler's collection. Though known to breed in the Laccadives (FAUNA 6 : 146), it is omitted entirely in NIDIFICATION. Ripley (SYNOPSIS) adds that it nests on small islets in the Nicobars.

Stuart Baker (loc. cit.) refers to their laying a single egg on the bare rock with no nest; but Peter Child (1960, *Atoll Research Bulletin* No. 74 : 9) states that in the Gilbert and Ellice Islands (mid-Pacific) the favourite nesting place is on the butt of a coconut frond, in the axil between the butt and the main trunk. A rough nest is made of twigs, dead leaves, roots, and coconut fibres.

482. **Anous tenuirostris worcesteri** (McGregor) (Cavilli Island, Sulu Sea) Whitecapped Noddy Tern.

Hume did not obtain specimens but said he had examined them from the Bay of Bengal, and knew of one having been shot at Port Blair. This record is omitted in the SYNOPSIS which quotes the FAUNA (6 : 147) as giving 3 records from the Bay of Bengal—Calcutta; near the mouth of the Ganges in the Bay of Bengal; and Minicoy. The last is in the Maldiv Islands, not in the Bay of Bengal as indicated in the SYNOPSIS. This species breeds in the Chagos Islands further south (*Ibis*, 1962 : 71).

\*500. **Treron pompadora chloroptera** Blyth (Nicobars) Pompadour or Greyfronted Green Pigeon.

1 ♂ Car Nicobar : wing 175 mm.

\***Treron pompadora andamanica** (Richmond) (MacPherson Strait, South Andamans) Pompadour or Greyfronted Green Pigeon.

1 ♀ Port Blair, S.A., 9 November 1963; 2 ♂♂, 2 ♀♀ Wrightmyo, S.A. :  
♂♂ wings 177, 163 mm.; ♀♀ 177, 178, 169 mm.

This bird is as large as the Indian Green Pigeon and looks very much like it in the field. It was quite common in most places in South and Middle Andamans, often in parties of 6 to 10. They feed on the

buds and fruits of forest trees, one pair having their crops so tightly packed with the green and ripe fruit of *Ficus infectoria* that they burst when the birds fell to the ground spoiling the skins!

Davison (1874 : 360) saw them building in May and surmised that they bred thereafter. A male taken on 23rd February had enlarged gonads, while a female on the same date appeared to have laid. Another on 28th February had a greatly developed egg in the ovary, and one shot on 3rd March also had developing ovaries. As in most pigeons and doves, the breeding season is probably spread over a long period.

Richmond (1903 : 308) described *Osmotreron chloroptera andamanica* from MacPherson Strait, South Andamans, as similar to *chloroptera* Blyth from Nicobars, but rather smaller, colour somewhat darker above and below; breast and sides deeper yellowish green, and undertail coverts more yellowish, the throat yellower than in *O. chloroptera*, and

Wing 165-168 as against 170.5-175 in *chloroptera*.  
Tail 91-98 ,, ,, 98-99 ,, ,,

Stuart Baker (5 : 189) stated that he could not separate *andamanica* of Richmond 'as in a large series his distinguishing characters prove to be individual'. He does not repeat these characters but Hume (1874 : 258) had drawn attention to the fact that the Nicobar birds 'invariably had less yellow on the outer margin of the secondaries (and generally though not invariably on those of their greater coverts)'. My specimens from the Andamans have two distinct yellow bars across the wing coverts in both the sexes, while the single specimen from the Nicobars has only one. I can see none of the other differences in size or colour, but this character appears distinctive enough to recognize an Andaman race.

**\**Ducula aenea andamanica* Abdulali (Betapur, M.A.) Andaman Green Imperial Pigeon.**

1 ♂ Port Blair, S.A., 14 Nov. 1963 ; 2 ♂♂, 2 ♀♀ Wrightmyo, S.A.; 2 ♂♂, 2 ♀♀ Betapur, M.A.

After this race had been described by me (1964), Mr. W. W. A. Phillips examined the large series available in the British Museum and confirms that the differences mentioned by me justify the recognition of a new race.

This fine pigeon appears common throughout the Andamans. Its loud *qoo* and sometimes a more guttural *qroo* is uttered once, twice, or thrice. I am also fairly certain that this species is responsible for a deep *whoom*, often in answer to one calling *gr—groo* the first *gr* resembling the beginning of a hiccup. I also noted a *gr—ghoom*. It is possible that one or other of these calls is uttered by the Andaman Wood Pigeon, whose call I was unable to record separately.

Compared to smaller pigeons, the flight appears slow and flapping, but they keep high and many shots were fired at birds out of range. Many collect on trees in fruit and the lower mandibles are curiously expandible and so permit the swallowing of extraordinarily large fruit. This expandibility was also noted while handling wounded birds in Chanda District, Maharashtra, but does not appear to have been referred to earlier.

The food included large yellow flowers of an unidentified tree and its fruit, the fruit of *Sideroxylon longepetiolatum*, *Myristica andamanica*, *Calamus pseudorivalis*, and *Ficus infectoria*.

On 24th February at Betapur, where the forest in places was a little lower and the pigeons more accessible, I twice saw a most extraordinary sight—birds rising from trees suddenly stopped in mid-air and dropped 15-20 feet on half-closed wings and with the neck drawn back. They then pulled up again, the whole performance being very like the display flight of the Blackbellied Finch-Lark (*Eremopterix grisea*) but creating a most grotesque appearance. Sálím Ali (*J. Bombay nat. Hist. Soc.* 39 : 338) has referred to aerobatics of a similar nature by the Imperial Pigeon (*Ducula badia*) in Travancore, which aerobatics he likens to those of the Roller (*Coracias*).

Some 20 birds of this species were handled during February and except for two or three all had enlarged gonads, one containing an unshelled egg. Osmaston (1906a : 488) found a nest with a single hard-set egg on 10 April.

\*508. **Ducula aenea nicobarica** (Pelzeln) (Nicobars) Nicobar  
Green Imperial Pigeon.

3 ♂♂ Car Nicobar, 7-10 March 1964

This is larger than the Andaman bird, the upper plumage being darker and bluer and showing very little green. The undertail coverts are dingy brown and not bright chestnut. The tail appeared longer in life. The grey of the head and breast is uniform and not tinged vinaceous and there is no sharply defined white forehead and chin as in the Andaman bird.

The calls noted were: (1) a deeper and longer *ghoom* than in *andamanica* and (2) a *koo-o* followed by a *kukku kukku-kukku*, more like an owl than a pigeon. This call was not heard in the Andamans.

Car Nicobar males had wings 252-255, avg. 254; tails 160-166, avg. 162.

A female shot on 7th March had 2 ova slightly enlarged 3 mm. × 3 mm.

Richmond (1903 : 308) quotes Abbott & Kloss regarding their extraordinary tameness on Tillangchong and Trinkut: 'They with the

megapodes formed our staple diet in the Nicobars, until we loathed the sight of them'.

509. *Ducula bicolor* (Scopoli) (New Guinea) Pied Imperial Pigeon.

Hume and Davison (1874 : 264) found this pigeon common in many of the Nicobar Islands and also a seasonal visitor to Great Coco, Barren, and Narcondam Islands. Davison noted that they preferred the mangrove swamps to the thick forests and Butler (1899 : 688) saw them in large flocks of fifty or sixty. While the black and white plumage showed up in flight, he said that they were extremely difficult to see in the 'shifting lights of a thickly-leaven tree'. He said the note was a chuckling *ku ku ku*.

Osmaston (1906a : 489) found it common and breeding on North Sentinel Island, 17 miles off South Andamans, and also common in Narcondam. It is said to be patchily distributed, being found on small islands, occurring in some places in almost incredible numbers. Kloss (1903 : 156) found it common in the Great Nicobar, while Richmond (1903 : 309) referred to one specimen each from Camorta, Trinkut, Little and Car Nicobar, and quoted Abbott & Kloss that 'it is less common than *C. insularis (nicobarica)* in the northern islands but plentiful in the southern. At Little Nicobar large numbers used to roost on the islets of Trak and Treis, 6 or 7 miles distance, and fly over every morning to Little Nicobar'. It is also reported as seen at Barren Island, but I did not see it anywhere.

[*Columba livia* subsp. The Blue Rock Pigeon.

Boden Kloss (1903) refers to their being introduced into Car Nicobar in 1898 and seeing 'numbers in the vicinity of the bungalow in 1900'. I did not notice it during my short visit and it may not have established itself.]

\*525. *Columba palumboides* (Hume) (Port Mouat, Andamans)  
Andaman Wood Pigeon.

1 ♀ Bambooflats, S.A., 9 Nov. 1963 ; 1 ♂? Bakultala, M.A. ; 1 ♀  
Betapur, M.A. ; 1 ♂ Long Island, M.A.

This is larger than the Imperial Green Pigeon, but the great height of the forest trees, together with the similarly coloured underparts, usually prevents discrimination. I got the impression that occasionally this species descends nearer to the ground than the other, a fact confirmed by Davison and Butler. The call is a deep *whoom* without the preliminary *gr* of *Ducula*. One crop held the fruit of *Leae* sp. and another the ripe fruit of *Syzygium cumini*. At Betapur, Middle Andamans (23rd February), they were often seen in pairs.

Hume (1874 : 266) referred to the possibility of another fruit pigeon, 'large whitish, something like *bicolor*, but greyer and with a large red

naked space round the eye', reported to him. This was later (*Stray Feathers* 3: 337) identified as the adult male of this species. The specimens collected by me are very different in colour from the plate in Stuart Baker's *INDIAN PIGEONS AND DOVES*, showing none or very little of the purple gloss on the upper parts, nor as pale a head. Stuart Baker thought that adult females were identical. Another plate accompanying Walden's note (1873) on Ramsay's collections from the Andamans appears more representative. This incidentally is marked *Janthaena columboides*, while the text on the opposite page refers to *I. palumboides*! Later Walden (1874a: 157) separated the Nicobar birds (from Trinkut and Nancowry) as *I. nicobarica* distinguishing it from the Andaman bird chiefly by its wanting the pearly-white or greyish-white head, throat, and nape. Later authors have ignored this separation.

\*527. **Macropygia rufipennis** Blyth (Southern Nicobars) Andaman Cuckoo-Dove.

2 ♂♂ Bakultala and Betapur, M.A.

Several were seen in heavy forest. One shot 25 feet up on creepers on a tree contained fruit of *Vitis* sp., and another had eaten the fruit of *Leae* sp. The second was a male with enlarged testes (24th February).

Hume (1874: 266) held that they varied *inter se* to an incredible extent and described two main types. He also said that they fed largely on the small Nepal or bird's-eye chilli. Boden Kloss (1903: 111) noted that the crops of all those shot on Kochal, Nicobars, were filled with large red chillies, and adds that their flesh tasted normal. Butler (1899: 690) said he examined four stomachs but found no chillies. Osmaston (1906a: 489) said its call was peculiar, somewhat resembling that of *Cuculus canorus*, the Common Cuckoo. It is found in both the Andamans and the Nicobars.

\* 536. **Streptopelia tranquebarica humilis** (Temminck) (Bengal and Luzon) Red Turtle Dove.

1 ♂ Wrightmyo, S. A.; 2 ♀♀ Ferrarganj, S. A.; 1 ♀ Bakultala, M. A.; 1 ♀ Long Island, M.A.

At Port Blair they were common and courting (10th February), the male bobbing up and down to the female at the top of a high tree. A male with well-developed testes shot at Betapur had been feeding on rice, and the bird was frequently noted in and near cultivated land, i.e. paddy. In November, I saw them in parties of 10 to 12 and again noted 20 to 25 birds collected on the tops of trees, just before sunset. They then all flew off in the same direction, no doubt to roost.

Davison found it exceedingly rare, but Butler said it was quite common and he saw scores collected together in a field. Osmaston (1906a: 489) found it extremely common around Port Blair and

noted that it had apparently multiplied since Hume's time (1873) with the increase of the area under cultivation. He found them breeding in April and May.

The five specimens obtained (1♂ and 4 ♀♀) have their wings 142 mm. in the male and 136-142, avg. 138.2, in the females. All the birds are in varying stages of plumage, and include a female in full male plumage. The Society's collection includes two others, from Bolandshar, U.P., Reg. No. 13050, and Prome, Burma, No. 13056, in male plumage but marked females. The Andaman birds appear nearest to *humilis* but though specimens were borrowed from the Zoological Surveys of both India and Pakistan, it has not been possible to satisfactorily sort out the races or plumages of this species.

[539. **Streptopelia chinensis tigrina** (Temminck) (Java) Spotted Dove.

Blyth received a specimen brought by Capt. Lewis from the Nicobars. Again in 1863 (Appendix) he says: 'On the Nicobar, *Turtur tigrinus* (Temminck) exists, similar to the race inhabiting Burma and Malaysia . . . . .'. Though Hume referred to this single record, Butler later suggested that it be dropped and I agree with him.]

541. **Streptopelia senegalensis cambayensis** (Gmelin) (Gulf of Cambay) Little Brown Dove.

Butler found it not uncommon at Port Blair but, as earlier observers had not recorded it, suggested that it may have been introduced later. Osmaston (1906a: 489) failed to see it, and I did not see it either. Ripley (SYNOPSIS) includes the Andamans in its distribution.

542. **Chalcophaps indica indica** (Linnaeus) (Amboina) Emerald Dove.

Dr. Dillon Ripley, to whom I sent the Andaman specimens, compared them with skins from the Nicobars available to him and informed me that the latter were identical with *indica*. The Nicobar birds have earlier been separated as *C. augusta* Bp. (*Comptes Rendus* 1855).

\*544. **Chalcophaps indica maxima** Hartert (Golapabung, South Andamans) Emerald Dove.

1 ♂, 1 ♀ Mannarghat, S.A.; ♂ Bakultala, M.A.

Hume found it extremely numerous. I saw a few specimens both in the Andamans and on Car Nicobar but, as in India, the bird lives in heavy cover and is difficult to secure at the right range—more than one was too badly damaged to preserve. I shot a ♂ with enlarged testes and a female with a granular ovary on 16th February. The organs of a male taken on 18th February were undeveloped. Osmaston (1906a: 489) took a single fresh egg on 29th May. This species, as in



many pigeons and doves, probably has an extensive breeding season.

\* *Calaenas nicobarica* (Linnaeus) (Nicobars) Nicobar Pigeon.

1 ♂ Mannarghat, S.A.

This is omitted in Ripley's SYNOPSIS. The FAUNA (5 : 214) gives the distribution thus : 'The Cocos, Andamans and Nicobars, throughout the islands of the Malay Archipelago to the Solomon Islands. It has not yet been found on any of the islands of the Timor group.' Blyth (1846b : 371) and Pollok (1879, 2 : 16) refer to its occurrence in the Cocos.

This species breeds in thousands on Battye Malve in the Nicobars and in lesser numbers on some of the other islands. Osmaston found nests on South Sentinel Island off Little Andaman. It is a straggler into the main Andamans, but Osmaston (1906a : 489) said it was not as rare as was generally believed as it frequents thick forest and is not easy to see. The only bird I met came off the ground in heavy undergrowth in evergreen forest on a hillside. It rose with a lot of fluster, like a junglefowl, and when winged dwalked rapidly through the undergrowth (Butler noted that when walking it carried its wings much lower than an Emerald Dove did, and sometimes so low as to suggest some injury at the shoulder). Water dripped out from its bill, suggesting that it had drunk (10 a.m.), probably at a stream 30 yards away.

The gullet had 4 or 5 seeds of *Sideroxylon longepetiolatum*, which had obviously been picked off the forest floor and were without any fleshy fruit. The stomach had peculiar hardened patches on opposite sides, which presumably permitted this species to crush and digest seeds which would not be edible by the other pigeons (For description of stomach, see Flower, *Proc. zool. Soc.* 1860 : 330). Butler (loc. cit.) took quantities of small seed from the crops of birds shot on Car Nicobar. It was of two kinds, one rather like a prune stone, so hard as to be almost unbreakable, and the other much resembling a sunflower seed.

The bird was a ♂ with slightly enlarged testes. The wing measured 240 mm. against the FAUNA measurements of 247-268 mm. It is a common cage bird and breeds well in captivity.

\*548. *Psittacula eupatria magnirostris* (Ball) (Andaman Islands)  
Large Indian, or Alexandrine, Parakeet.

1 ♂ Wrightmyo, S.A. ; 1 ♂, 1 ♀ Ferrarganj, S. A.

This is quite common in South and Middle Andamans. A male and a female were shot out of a large party of 30 to 40 birds in a tree; the former was in breeding condition, but the latter not. At Long Island on 27th February, 2 pairs were seen attending holes in a tall *gurjan*. Osmaston (1908 : 358) noted it on Barren Island.

Hume said their note was quite different from that of other species in the Andamans and that they roosted in mangroves at the entrance to a creek. Osmaston (*J. Bombay nat. Hist. Soc.* 17 : 240) has an interesting note on patches of mangrove (*Rhizophora mucronata*) an acre or so in extent, in which all the mangroves are apparently dead at the top or 'stag-headed'. Various explanations, including the slow subsidence of the Andamans were put forward, but Osmaston discovered that it was caused by large numbers of this and the Redbreasted Parakeets collecting to roost there! The bills of the males are heavier and the red patch on the wings is a brighter red than in Indian birds. The bills of the females do not show the same difference.

[*Psittacula krameri* was introduced by Col. Tytler (c. 1863) but had disappeared by the time of Hume's visit in 1873.]

\*552. *Psittacula alexandri abbotti* (Oberholser) (South Andaman Island) Redbreasted Parakeet.

1♂, 1 o? Wrightmyo, S. A. ; 1♂ Bakultala, M. A. ; 1♂ Long Island, M.A. ; 1♂ Bambooflats, S. A., 17 March 1964.

Common in South and Middle Andamans. Often seen in Port Blair and in fields and open country.

The flight is slow and the rounded wings noticeable. The call was a plaintive but distinctive *kewn*, while a female was heard to utter a nasal *kaink*.

Kloss (in Richmond 1903 : 303) said it was common in large flocks and did extensive damage to paddy. Osmaston (1906a : 487) stated it came to Port Blair in tens of thousands in December and January, devouring the paddy.

553. *Psittacula caniceps* (Blyth) (Nicobars) Blyth's Nicobar Parakeet.

This large parakeet has been recorded only from the islands of Montschall, Kondul, and the Great Nicobars. Davison said that it keeps to the top of the higher trees. The call is a wild screeching note which it utters both when seated and in flight. It feeds much on the ripe fruit of the pandanus, so abundant on the inhabited islands. It is very popular as a pet bird and numbers are caught for sale. I only saw one in a cage at Port Blair, large but dingy to look at.

\*555. *Psittacula longicauda tytleri* (Hume) (Andamans) Red-cheeked Parakeet.

1♂, 1♀ Wrightmyo, S. A. ; 1♂, 1♀ Bakultala, M. A. ; 1♀ Long Island, M. A.

This parakeet was common in most places in South and Middle Andamans, and has been recorded from Barren Island, Narcondam, the Cocos, and Preparis. Butler saw them in vast flocks of thousands

about the fields of ripe paddy. He also refers to an officer telling him of an entirely light-blue bird seen with a large flock of this species.

Osmaston (1906a : 487) took 2 fresh eggs on 20th February.

\*556. *Psittacula longicauda nicobarica* (Gould) (Nicobar Islands)  
Redcheeked Parakeet.

1♀ Car Nicobar.

This is the Nicobar form of the last species. Hume said it fed largely on papaya, ripe pandanus, and the covering of betel nuts (*Areca catechu*).

My specimen has a 191 mm. wing as against 167, 169, and 170 in the 3 females from the Andamans. In addition, the bill is heavier, the primaries bluer, and the underparts more yellow.

\*566. *Loriculus vernalis vernalis* (Sparrman) (Cachar) Indian Lorikeet.

2 ♂♂ Maymyo, S. A. ; 1 ♂ Wrightmyo, S. A. ; 1 ♂ Bambooflats, S. A. ; 1 ♂, 1 ♀ Bakultala, M.A. ; 1 ♂ Long Island, M.A.

The lorikeet was common everywhere in South and Middle Andaman. Hume and Davison did not see it in the Nicobars, but referred to a Mr. Wood-Mason seeing one on Great Nicobar. Abbott & Kloss (Richmond 1903) report it 'everywhere in the Nicobars' but secured no specimen. It is omitted from the Nicobars in the SYNOPSIS.

Davison took 3 eggs on 19th April and said there was no lining to the nest. On 15th February I saw 2 newly-hatched young at the bottom of a hole in a vertical stump 3 inches thick and about 10 ft. from the ground. The hole was at the top and the nest 2 ft. lower, was lined with green leaves. The tree stood on the edge of the forest, within a yard of the tidal mark.

Butler (*J. Bombay nat. Hist. Soc.* 11 : 736) confirmed that the nests were lined with leaves and added that the birds sat close and when disturbed on their eggs uttered a long-drawn querulous note like *chee-ee*.

Osmaston (1906a : 487) found nests at the bottom of holes in stumps, 'the eggs being usually below the level of the ground'.

Several were noted on the flowers of *Erythrina* sp.

In *J. Bombay nat. Hist. Soc.* 37 : 754, Whistler doubted if *rubropygialis* could be separated from typical *vernal*is and later (loc. cit. 44 : 12) confirmed that it could not. The race *rubropygialis* is retained by Ripley (SYNOPSIS : 173) but I cannot agree after an examination of twenty-seven specimens.

The blue on the throat appears in males only, showing in 2 (and slightly in a third) out of 5 from the Andamans, in 7 out of 8 from western and southern India, and in 4 out of 8 from the North-east and Orissa. Of the 25 sexed skins only 5 were of females.

Three specimens from Burma are slightly smaller (wing 85-90, avg. 87) than the others (FAUNA 87-97, avg. 93), while their upper plumage is slightly yellower.

\* **Cuculus micropterus** subsp. Indian Cuckoo.

Ball (1872 : 280) records one and Walden (1873 : 304) identifies 4 specimens by Ramsay as of this species. In *Stray Feathers* 3 : 264, Hume refers to a true *Cuculus micropterus* killed in the Andamans by Mr. A. de Roepstorff. Osmaston (1906a : 487) found them common and noisy from April to June. These records are omitted in the SYNOPSIS.

I heard the *cross-word-puzzle* call at all camps between 11th February and 6th March, but did not obtain any specimens.

**Cuculus canorus** subsp. Cuckoo.

Hume (1876 : 288) states that he received one killed in the Andamans on 16th November. This has been ignored in both the FAUNAS, and in the SYNOPSIS.

580. **Cuculus saturatus saturatus** Blyth (Nepal) Himalayan Cuckoo.

Hume (1874 : 83 and 190) saw and heard it in the Andamans and Nicobars and obtained two specimens on Kondal. Butler says it is not uncommon in both groups during the summer months.

581. **Cuculus poliocephalus poliocephalus** Latham (India) Small Cuckoo.

In the SYNOPSIS the Andamans are included in the range of this species.

586. **Chalcites maculatus** (Gmelin) (Ceylon) Emerald Cuckoo.

Blanford (FAUNA 3 : 223) says it is found in the Andamans and Nicobars, but the whole area is omitted by Stuart Baker, and in the SYNOPSIS.

587. **Chalcites xanthorhynchus xanthorhynchus** (Horsfield) (Java) Violet Cuckoo.

Hume (1874 : 191) refers to a specimen near Port Blair in wet tropical evergreen forest in mid-August, and Walden (1874c : 136) to birds obtained on 5th May and 14th and 23rd July, including an immature one.

I did not see any and the dates suggest a monsoon visitor.

The SYNOPSIS records it from the Andamans and Nicobars, in addition to Assam.

[*Surniculus lugubris* subsp. Drongo-Cuckoo:

Kloss (in Richmond 1903 : 302) says he shot and lost a bird apparently of this species on Katchal Island. It is rightly omitted in later works, but it is noticeable that no small drongo is known from the Nicobars.]

\*592. *Eudynamys scolopacea dolosa* Ripley (Barren Is., Andamans)  
Koel.

1 ♀ (by plumage), Port Blair, 19 February : wing 211 ; tail 200.

I saw and heard this bird at Port Blair and Betapur, Middle Andamans. The calls were identical with those of Indian birds.

Kloss (in Richmond 1903 : 302) found it very common in the Nicobars and often saw a female koel pursued by a grackle, both in a very excited state, shrieking and screaming with rage. This prompted him to suggest that the koel parasitises the grackle and also the Imperial Pigeon (*Carpophaga*), as the koels could be called up by imitating the deep hoarse *coo* of the pigeon. Osmaston (1906a : 487) said it was a migrant to the Andamans, arriving in September-October, leaving in April and not breeding there. He also noted it on Barren Island (1908 : 358) during a one-day trip and described it as a cold weather visitor.

The single specimen which was obtained by Mr. Young is in female plumage. The 211 mm. wing is longer than in any of either sex from India. The upper parts are blacker and with distinct rufous dots; the rufous wash, visible in the field, extends over all the white parts including chin, lower belly, and subcaudals. Ripley has described this race from the Andamans and Nicobars allowing the very abnormal range in wing size (198-227.5 mm.) as offset by the wing-tail index of 91. In this specimen it is 94.7!

\*603. *Centropus (sinensis) andamanensis* Beavan (Andaman Islands)  
Crow-Pheasant.

2 ♀♀ Wimberleyganj, S. A. ; 1 ♂, 1 ♀ Wrightmyo, S. A. ; 1 ♀ Long Island, M. A.

This Crow-Pheasant was often seen or heard in most camps in South and Middle Andamans and also at Port Blair, usually among trees and also in mangrove swamps.

They often called for quite some time after dark and very early in the morning. Long spells were heard at night. There were 20 to 22 hoots at a time ; the call sometimes ended in a complaining tone.

Butler said they were partial to frogs, which were killed and swallowed. Hume also noted this bird on Great and Little Coco and the Table Islands. On Kondal (Nicobars) and also on Jolly Boys Island, South Andamans, he saw a larger bird of the *rufipennis (sinensis)* type. There is some variation in the intensity of the colours of the wing,

head, and back, and I must confess that I saw several birds which looked different in size and colour. All the specimens, however, are of this form.

A male (16th February) and a female (12th February) had enlarged gonads.

Hume speaks of eggs taken by Capt. Wimberley in June. He also refers to traces of barring on some specimens, apparently young (see Abdulali 1956, *J. Bombay nat. Hist. Soc.* 54 : 183). Osmaston (1906a : 487) took eggs in July.

607. **Tyto alba deroepstorffi** (Anonymous = Hume) (Aberdeen, South Andamans) Barn Owl.

Hume (1875 : 390) described this from a single bird obtained by de Roepstorff at Aberdeen, South Andamans, and Osmaston caught one in a field. Butler (1900 : 568) saw 2 skins in the Indian Museum and also obtained one himself. The note, he said, was the usual barn-owl screech and the pellets he found indicated that the food consisted entirely of rats and mice.

\*613. **Otus balli** (Hume) (South Andaman Island) Andaman Scops Owl.

1 ♀ Wrightmyo, S.A.

The only bird which I met a little after sunset was perched on a roadside stump, a couple of feet off the ground on the edge of open cultivated land. The shot blew off the ends of both wings and also half the tail, preventing any examination of the relative lengths of the several primaries, and I assume that it is not *Otus scops* as the tarsus is not fully feathered and the plumage does not agree with that of any of this species available for examination.

Butler (1899 : 570) found it very common in the Andamans, but said that because of its small size and nocturnal habits it was very difficult to procure. He said its note resembles the syllables *hoot!* *hoot-cooroo!* jerked out very rapidly, the rolling 'r' in the last note being very distinct. He added that it was identical with the call of the Ceylonese Scops Owl and that it also had a low chuckling note. It fed, to a considerable extent on caterpillars, in searching for which 'it slides up and down the boughs of small trees in a very parrot-like manner'. Two of his specimens were captured in bungalows, and he thought that a female shot in May had 'just incubated'.

Osmaston also noted it as common (1906a : 487) and eggs were taken by him and Wickham between 20th February and 14th April (NIDIFICATION 3 : 521).

It does not appear to have been recorded from the Nicobars.

**Otus scops modestus** (Walden) (Andamans) Burmese (?) Scops Owl.

Various owlets were recorded from the Andamans and Nicobars—*Ephialtes spilocephalus* by Blyth, a '*Scops* of *pennatus* type' by Ball, *E. lempigi* by Tytler. Walden described *modestus* as a new form from the Andamans ('distinguishable from all the other described Asiatic species by its sober colours and plain markings and, with the exception of *Scops mantis*, by its diminutive size'). Hume (1876: 283) described *nicobarica* from Camorta as "resembling *sunia* with whole forehead, crown, occiput, and upper parts generally, together with the head, throat, and breast ferruginous chestnut, much more than *sunia* ever is . . . the vermiculations and the markings on the upper surface are coarser and more sparse than in rufous *pennatus*." Blanford (FAUNA 3: 296) said that *modestus* was a young *balli* but it was accepted as a race of *Otus sunia* by Stuart Baker (FAUNA 4: 437) as found in Assam south of the Brahmaputra, Burma south to Tenasserim, etc., Andamans and Nicobars. Ripley in the SYNOPSIS has omitted the race *modestus* (and *nicobarica*), excluded the species from both the Andamans and the Nicobars, and accepted *O. s. sunia* for Burma.

It appears evident that some form of Scops Owl, other than *balli*, exists in the Nicobars, and probably in the Andamans too.

**\*645. Ninox scutulata obscura** Hume (Camorta, Nicobars) Brown Hawk-Owl.

2 ♂♂, 1 ♀ Mannarghat, S. A.: wings 215, 212, 200; tails 123, 115, 120.

At Mannarghat it appeared to be quite common in a rubber plantation, on the edge of heavier forest, commencing to call in loud disyllabic *coo-ooks* at sunset from relatively exposed perches either on dry branches or at the top of a tree. I found the 2 males I shot by their calls, and the female which was shot by the bush-policeman was said to have been similarly traced. It was also heard at Bakultala, M.A.

One of the males and the female had enlarged gonads though not yet in breeding condition.

Butler (1899: 684) said it was extremely common in the Andamans and that he had heard as many as a dozen hooting at the same time on fine still nights. He described the calls as a low *whoo-wuk* or *coo-whoop*, a soft clear flute-like sound, and stressed the fact that it was more like that of *scutulata* than of *affinis*.

Richmond (1903: 304) measured a male from Car Nicobar as having a 206 mm. wing and a female from Katchal 203 mm. The male is smaller than the two from South Andamans (215, 212 mm.). The Andaman male with undeveloped testes is paler brown on the under-surface than the other two.

The stomachs of the birds mentioned by Richmond contained beetles, which Butler also said was their principal food. The birds I collected contained grasshoppers.

646. *Ninox affinis affinis* Beavan (Aberdeen Point, Port Blair, South Andaman Island) Brown Hawk-Owl.

In the Appendix to Blanford's FAUNA (4: 485), the call is described as a loud *craw*, something like a *Glaucidium* note. Earlier (3: 311) Capt. Legge said it was a not unmelodious hoot *whoo-uk*. This agrees with my version of *obscura* and was in all probability a mistake.

Davison saw it hawking small moths (1874: 153).

Butler (1899: 571) said it fed on moths and beetles.

At Long Island, an owl called from the jungle *kra-aunk* . . . . ., . . . *kra-aunk* . . . . . *kuk*, *kra-aunk* every 3 or 4 seconds sometimes with, but usually without, a preliminary *kuk*. It appeared to be very common but I could not get one and must leave its identity doubtful.

647. *Ninox affinis isolata* Baker (Car Nicobar) Brown Hawk-Owl.

Butler (1899: 571) did not hear it during a short visit and thought it was less common than in the Andamans.

[*Strix selaputo* Horsfield = *S. orientalis* Shaw Malayan Wood Owl.

Blyth (1846: 369) referred to a specimen obtained by Capt. Lewis in the Nicobars but not preserved, which he (Capt. Lewis) later identified with a skin from Malaya. A large owl was noted by Tytler (1867: 316).

Butler (1899: 568) also said that 'a *Syrnium* of sorts does occur in the Andamans', and he heard its typical *to-whoo*.

He also refers to a large horned owl (*Ketupa? javanensis*) which was seen and shot by others in desolate mangrove swamps bordering the salt-water creeks. Neither of the owls is mentioned in the FAUNA or SYNOPSIS, but their occurrence must be looked for.]

\*679. *Caprimulgus macrurus andamanicus* Hume (Jolly Boys Island, South Andamans) Longtailed Nightjar.

2 ♂♂ Port Blair, S.A., and Long Island, M.A.: wing 179 & 184; tail 118 & 128.

2 ♀♀ Wrightmyo, S. A., and Betapur, M.A.: wing 182 & 174; tail 117 & 129.

This nightjar was seen or heard at all camps in South and Middle Andamans. It was seen in mangrove at the mouth of a creek at sunset, and also seen flying out daily from a heavily forested hillside to a mangrove swamp.

The call is a typical nightjar *chuk-chuk-chuk* often preceded by a *kwak*. Butler describes it as a liquid monosyllabic *clook! clook!* They



spend the day, usually in pairs, among the leaves on the forest floor.

A male shot on 25 February had slightly developed testes. Davison obtained 2 eggs on 12 April. Osmaston (1906a : 487) found a slightly incubated egg on 9 April and two half-fledged young on 4 May.

Wickham (*J. Bombay nat. Hist. Soc.* 19 : 993) took 2 fresh eggs on 4th February and found another two about a yard away on 25th February. He goes on to cite another instance of 2 eggs taken on 6th and 30th March at another place, under the same circumstances.

Hume (1873 : 162) states that several persons, who landed on Southern Jolly Boys Island, saw a huge nightjar which was 'certainly *Lyncornis*'. At two camps I saw birds hawking at dusk, which I would have noted as large nightjars had I not been able to approach nearer and determine that they were Broadbilled Rollers (*Eurystomus*)!

683. *Collocalia brevirostris brevirostris* (McClelland) (Assam) Plain-rumped Himalayan Swiftlet.

I am unable to trace the authority for the statement in Ripley's SYNOPSIS that this is an 'uncommon winter visitor to the Andamans'. There also appears to be no evidence that this species makes an edible nest and, as it cannot be called the Indian Edible-nest Swiftlet, I adopt the names used by Stuart Baker in NIDIFICATION for the two races.

684. *Collocalia brevirostris innominata* Hume (Andaman Islands) Striperumped Swiftlet.

The type specimen obtained at Port Mouat in South Andamans appears to be the only record from this area, where it can only be a winter straggler. It occurs in the Hupeh Province in Central China.

\*686. *Collocalia fuciphaga inexpectata* Hume (Andaman Islands) Greyrumped Swiftlet.

2 ♂♂ Wrightmyo and Long Island : wing 116, 116.

2 ♀♀ Wrightmyo and Long Island : wing 115, 113.

At all camps in South and Middle Andamans, and also on Car Nicobar, small parties were frequently seen hawking over rice, rubber, mangrove, and other wooded portions not too high. At Wrightmyo parties were seen flying seawards in the evenings, no doubt to roost.

This species make the pure translucent white nests which go to make the famous soup. Osmaston (1906a : 486) saw colonies in caves by the shore in several places. On the sea-shore at Mandapahar, Chiria Tapoo, South Andamans, was a small cave 15 yards × 15 yards × 4 ft. high in which I obtained 3 empty nests, while the walls bore traces of other nests having been removed. Large numbers of swiftlets flying

outside were white-breasted birds that had their nests in another cave about 200 yards away. We left this place at 4-30 p.m. and must assume that the birds came in to roost later. They were certainly seen hawking over creeks and other places far from caves, much later.

Hume took eggs in a cave on Little Button Island on 21st March. I found an empty nest in a rock crevice on the same island on 29th February, and saw the birds hawking outside, but the nest was dark in colour except for a paler and thicker rim.

On 22nd February as I watched a party hawking over mangrove, I saw one bird go round in small circles, with tail expanded, and quivering wings raised 45° above the level of the body. A swallow (*Hirundo rustica*) appeared to be the only other bird interested in the performance.

\*687. *Collocalia esculenta affinis* Beavan (Port Blair, South Andaman)  
White-breasted Swiftlet.

1♂, 2♀♀ Chiria Tapoo, S.A.; 1♂ Wrightmyo, S. A. : wing 97-102, av. 98.7 mm.; tail 37-40, av. 38 mm.

This swiftlet is common in both the Andamans and the Nicobars. Tytler left notes made c. 1863 saying that they did not nest in houses, but a little later in 1873 Hume recorded that they nested freely in houses on both Ross and Chatham Islands (near Port Blair). I saw it around the Secretariat and at other places in Port Blair, and though I did not see any nests in houses there was every appearance of their still nesting there.

On 15th February at Mandapahar, Chiria Tapoo, South Andamans, I saw hundreds entering and leaving a cave on the seashore. The cave, in a 200 ft. rock-face, was 10 ft. high, 20 yards deep, and 15 yards wide. The tide entered the cave, but the innermost parts were bespattered with dung and a very peculiar smell prevailed. The walls were plastered with their very distinctive nests of moss glued together with saliva. Some nests touched each other and were stuck together. Many contained 2 eggs in an advanced state of incubation. Three specimens shot outside the other cave referred to under *C. f. inexpectata* had undeveloped gonads.

Butler saw them nesting in the Nicobars in August and September and at Port Blair in December and January. Osmaston (1906a: 486) said it bred in vast numbers at the Chatham Saw Mills, and their nests were not made of moss but of Casuarina leaves and coconut fibre, both of which were not indigenous to the Andamans. In the FAUNA (4: 352), Osmaston is quoted as saying that the nests were made of 'Casuarina leaves, seaweed and human hair, consolidated and matted together with saliva'. Hair was found used in the majority of nests. Stuart Baker

refers to some 'nests which are almost purely saliva; I have two such with just one or two fragments looking like moss incorporated'.

*Ibis*, 1892: 578, reproduces an account of nest-collecting in the Andamans from a recent issue of the *Englishman* of Calcutta. Reference is made to 3 species of *Collocalia* [*innominata*, *inexpectata*, and *linchi* (*esculenta*)] arriving in that area towards the end of November, before which parties are sent out to clear the caves of all the old nests. About the last week in January, the collectors go round the islands, a journey which takes about three weeks in an open boat. The best quality resembling pure isinglass and worth their weight in silver are found in limestone and volcanic rock, the nests built in sandstone and serpentine being inferior. All the nests are taken and the birds build faster, a second collection being made at the end of February, which is usually the best. A third is made in April, when the nests, though of good quality, are thin and dry. . . . . The best quality realised Rs. 130 to Rs. 145 per viss and the third quality with feathers and other foreign material Rs. 90. It is admitted that it is not known which species makes which nest.

It is commonly accepted that after the first crop is taken, subsequent nests are less pure. It may therefore be worth while quoting from a recent letter from Lord Medway, to whom I had sent the skins and nests of the swifts for confirmation of my identification:

'I have never been able to see differences between first nests and replacement nests, in terms of structure or of composition of the material, apart from the fact that the first nests taken any season tend more often to include remnants of the previous season's structure.

'Among the nest collectors, there is a vast amount of very dubious lore related to the qualities and properties of the nests, which is in many cases without foundation. I am inclined to think that the business of first and second nests falls into this category.'

I saw the birds at Wrightmyo and, though I have an impression that I met it in the Middle Andamans, I cannot find this in my notes. It was frequent at Car Nicobar, and Abbott and Kloss (in Richmond, 1903: 301) took six specimens, all females, along the shore in Little Nicobar. Davison has some notes on their building and nesting (Hume 1874: 159) and refers to the remarkably small amount of space that a very large number of these birds will occupy: 'They all cluster together like a huge swarm of bees clinging to the bare boards of the roof in a wonderful manner'. Butler (1899: 564) refers to a curious habit: 'Often when one bird is clinging to the commencement of a nest, its mate flutters round unable to find a foothold. In this case, the sitting bird catches the other by the tips of the primaries and holds him suspended there for some little time. In a cluster of these birds at work building, I have sometimes seen three or four at the same time hanging down-

wards in this way, their mates holding them by the tips of their outspread wings.'

I have seen them drink at a pond at midday.

The upper parts of all the specimens show a distinctly greenish gloss as against deep bluish in a single skin from Fraser's Hill, Singapore, which is also larger (Wing 110, Tail 40).

\*691. *Chaetura gigantea indica* Hume (Andamans and southern India)  
Large Brownthroated Spinetail Swift.

1 ♀ Long Island, M. A.: wing 189, tarsus bare below knee.

These birds appear to be less common than they were earlier. Hume said they were common about Port Blair, and Butler saw them throughout the year, noting scores assembling every evening round a bungalow on Mt. Harriet, where Osmaston (1906a : 486) also found them common. I saw small parties of what were probably these birds at Wrightmyo and Betapur, usually flying over a beat of several miles and returning the same way. They were usually high out of range and can apparently only be obtained when they come down to drink. At Betapur, a party of 10 to 15 was circling over the village, their tails sometimes expanded with the spines visible. One evening on Long Island, I secured one out of a pair circling over a freshwater pool, presumably to drink.

The feathers at the gape of the wounded bird appeared long and erectile—I wonder if this is an adaptation to increase the catching area (?).

Butler refers to some being infested by a large flat tick, nearly  $\frac{1}{3}$  of an inch in length. From one bird he took over 30 which were clinging in rows to the bases of the stiff tail feathers under the lower tail coverts. He added that winged birds uttered a shrill squeaking cry. Only one of the 15 birds he handled had the spot in front of the eye white, being mouse colour in the others. Davison (1873 : 473) said their presence high up in the air could be detected by their sharp, clear note frequently uttered on the wing.

696. *Apus apus pekinensis* (Swinhoe) (Pekin, China) Swift.

Ripley (SYNOPSIS) mentions this as a winter visitor to the Andamans, presumably referring to the single specimen shot by Capt. Wimberley on 30th July 1873 and referred to by Hume (1874 : 156) as *A. acuticauda* (Blyth).

Kloss (Richmond 1903 : 301) 'saw a large flock of swifts on Barren Island' but gives no description.

Butler also saw a small white-rumped swift, which he calls *Cypselus subfurcatus* Blyth, hawking round the bungalow on Ross Island with a number of *Collocalia*.

723. *Alcedo atthis bengalensis* Gmelin (Bengal) Common Kingfisher.

I collected what I thought was this species at Long Island, but when working out the collection I found that it was *Alcedo meninting*. Birds seen on rocks on the seashore were almost certainly of this species. Davison said it occurred in both the Andamans and Nicobars, but was not common, and Butler confirmed that for every one of this species he saw at least three of *beavani* (*meninting*). Osmaston (1906a : 162) saw a few around Port Blair.

Hume thought that the birds from the Andamans and Nicobars had shorter bills and duller plumage than continental birds, but Richmond (1903 : 300) said these differences were not visible in 4 specimens from the Nicobars.

\**Alcedo meninting rufigastra* (Walden) (South Andamans) Blue-eared Kingfisher.

2 ♂♂ Wrightmyo, S. A., and Long Island, M. A.: wing 68 (2); tail 29, 27; bill from feathers 38, 36.

In size, colour, and habits, this bird is very similar to the Common Kingfisher (*A. atthis*). One, flushed off a mangrove root in a tidal nulla bordered by *Rhizophora mucronata*, flew low over the water but travelled two such spurts of about 400 yards each before permitting a shot. The other was shot from a tree along the sea-shore. Butler said it was generally found on freshwater streams, while Davison noted it as exclusive to salt-water creeks. Osmaston (1906a : 162) found them common on both salt- and freshwater creeks, and nests, usually with 5 eggs, between 25th June and 15th July.

The two specimens are very similar to those from Assam and other parts of India, except that they have less purple on the nape and the sides of the head. This characteristic is first mentioned by Stuart Baker in the FAUNA (4 : 257). In the SYNOPSIS this race is omitted, and the Andamans are omitted from the range of this species.

728. *Ceyx erithacus macrocarus* Oberholser (Great Nicobar) Three-toed Kingfisher.

The distribution of this race in both Stuart Baker's FAUNA and Ripley's SYNOPSIS reads : 'Andamans and Nicobars', but their status in the two groups is very different. From the Andamans there appear to be only three records—two of birds which flew into houses near Port Blair (Hume 1874 : 173 and Butler 1899 : 561), and the third (Osmaston 1906a : 162) of a bird excavating a nest hole in the bank of a small rocky stream in dense forest below Mt. Harriet on 27th May. In Great and Little Nicobar they were common, Abbott and Kloss obtaining 10 specimens.

**Pelargopsis capensis shekarii** Abdulali (Chiria Tapoo, South Andamans) Storkbilled Kingfisher.

2 ♀♀ Chiria Tapoo, S.A., and Long Island, M.A.

When I described this race (1964) I had only two specimens from the Andamans and two from Burma. Mr. W. W. A. Phillips has kindly looked at the material at the British Museum and informs me that the 7 specimens from the Andamans available there have, in series, paler heads and less blue on the upper wing coverts than in Burmese birds.

This bird was seen quite a few times in mangroves, along creeks, and on the sea-side, both in South and Middle Andamans. It uttered a loud *khà-u khà-u khà-u* 8 to 10 times and then flew off with a louder *khi-ok khi-ok*. Davison (Hume 1874 : 166) refers to a loud shrieking note uttered on the wing. Osmaston (1906a : 162) found it fairly common in brackish creeks, but did not obtain a nest.

**732. Pelargopsis capensis intermedia** Hume (Galatea Bay, Nicobars) Storkbilled Kingfisher.

Hume noted it on the seashore at Galatea Bay, Kondul, Pilu Milu, Montshall, and Little Nicobar. Abbott (in Richmond 1903) said it was common in Great and Little Nicobar, but did not see it on any of the other islands. His 5 specimens were all females.

**\*734. Halcyon coromanda mizorhina** (Oberholser) (North Andaman Island) Ruddy Kingfisher.

Hume rightly stated that it was far from common and affected the gloom of the mangrove swamps. I got glimpses of it on four occasions on South and Middle Andamans, but could not get a shot. The colour of the bird resembles that of the dry leaf of the mangrove *Rhizophora mucronata*.

**\*738. Halcyon smyrnensis saturatior** Hume (Andaman Islands) White-breasted Kingfisher.

1 ♂ Ferrarganj, S.A.; 2 ♀♀ Wimberleyganj, S.A., and Long Island, M.A.

This kingfisher was one of the commonest birds in South and Middle Andamans, being both near and far from water. On a 30-mile drive I counted 65 birds, no doubt missing many on the other side of the road. The white patches on the wing are more conspicuous than in Indian birds, and were particularly prominent when a bird perched near another opened its wings in some form of courtship. During the course of the day I saw this being done on several occasions. A bird was seen to settle on a rock with a large crab. With much effort the legs were battered off, then the carapace was folded over but was still too large to be swallowed!

Butler (1899 : 562) states that he has sometimes seen it hover over

water for some seconds, like *Ceryle rudis*, and then dart obliquely into the water and catch a fish. Osmaston (1906a : 162) found it breeding in holes 2 to 3 feet deep, in April and May.

The 3 specimens are very distinctly darker brown on the head and underparts than any from India. They show among themselves as much variation in the blue of the upper parts as the 3 races said to exist in India, *smyrnensis* (Linnaeus), *fusca* (Boddaert), and *perpulchra* Madarasz. 56 specimens are available in Bombay, but I cannot separate them by colour. I have not measured them.

\*739. **Halcyon pileata** (Boddaert) (China) Blackcapped Kingfisher.

Tytler said it was common in the Andamans, but Hume and Davison found it rare in both the Andamans and Nicobars, and failed to secure specimens. Capt. Wimberley obtained a pair near Port Blair. Osmaston (1906a : 163) saw it thrice (Port Blair, Cinque Is., and Narcondam) in fifteen months.

I saw it twice at Betapur, flying low over the creek, but did not get a specimen.

Abbott (Richmond 1903 : 301) saw it on Barren Island, and met it on all the Nicobars, finding it particularly numerous along Galatea River in Great Nicobar.

\*742. **Halcyon chloris davisoni** Sharpe (Aberdeen, Port Blair) White-collared Kingfisher.

♂ (wing 110 mm.) Bakultala, M.A.; 2 ♀♀ (109, 114) Shoal Bay Creek, S.A., and Bakultala, M.A.

This kingfisher, like the Whitebreasted, was frequently seen in the South and Middle Andamans in mangroves, among trees on the sea-shore and often quite far from water. A low trill was heard.

Hume found it feeding on centipedes and small lizards and saw it hammer shells on a lump of coral. One was similarly trying to knock to pieces a *Fusus* containing a red hermit crab.

I found the thick red claw of a crab in one stomach. Richmond (1903 : 301) found small fish and crabs in two stomachs.

Hume quoted Wardlaw Ramsay as informing him that he saw a pair going in and out of a hole in a tree near Mt. Harriet, probably with young. The male I collected on 22nd February had slightly enlarged testes. Osmaston (1906a : 163) found several nests in April and May, usually in holes and banks, only about a foot deep; occasionally also in holes in white-ants' mounds or in the upturned roots of a tree. He noted another in a hole in a mango tree, about 15 feet from the ground.

In flight, this bird often does not look like a kingfisher. One seen

on North Button Island on 29th February, appeared larger and of a different colour.

\*743. **Halcyon chloris occipitalis** (Blyth) (Nicobars) Whitecollared Kingfisher.

♂ Car Nicobar; 3 ♀♀ Car Nicobar; wing 113 (♂)-117 (♀), av. 115 (105-113); tail 69-80, av. 71.7 (65-72).

The bird was common in groves of coconut on Car Nicobar, looking very unkingfisher-like.

Davison said they commenced breeding at the end of February, and took an oviduct egg on 24th February. He found three nests on Camorta excavated in ants' nests, which are 'generally placed against the trunks of very large trees, but occasionally against those of the coconut palms at heights of from 4 to 20 feet from the ground, and vary from 10 to 30 inches in diameter, being composed of some sort of clay'. Butler (1899: 562) refers to hornets occupying such a nest in which the kingfisher nested at Mergui.

Only one male and female have the buffy tinge on the underparts, but the larger size and the long buffy white supercilium are distinctive.

\*745. **Merops leschenaulti andamanensis** Marien (Port Blair) Chestnutheaded Bee-eater.

2 ♂♂ Bambooflats, S.A., 9 Nov. 1963, and 17 March;  
2 ♂♂, 1 ♀ Wrightmyo, S.A.; 1 ♀ Long Island, M.A.

Hume obtained a large series but did not think it different from specimens from Anjango in the South to Dehra Dun and Tipperah (1874: 163). Marien (*J. Bombay nat. Hist. Soc.* 49: 155) separated the Andaman birds by their larger size which is confirmed by the following measurements:

<i>Andamans</i>			<i>India and Burma</i>		
	Wing	Tail		Wing	Tail
4 ♂♂	110-115 av. 113	84-90 av. 86.25	7 ♂♂	102-111 av. 107	74-84 av. 80.7
2 ♀♀	109-112 av. 110.5	86-88 av. 87	9 ♀♀	104-109 av. 105.8	78-83 av. 81

The heads of some birds, as in Indian birds, are darker than in others, but this difference does not appear to be linked with sex or season.

This bird was often seen in South and Middle Andamans, the blue back and reddish head being excellent points for identification. It has not been recorded in the Nicobars.

On 16th February I shot 2 males and a female; the gonads of the males were enlarged, those of the female were dormant. A bird dug out of a nest hole in the sandy bund of a paddy field (11th February), apparently still digging, was a male. Does this suggest



that the male has a more active share in the preliminary stages of nest-building etc. than the female?

On 22nd February, a party of 10 to 15 birds appeared interested in holes in the bank of a nulla. The holes were not crowded together, being at least 10 yards apart. On 25th February, one of a pair was flushed out of an 18 in. hole, 3 ft. above the water-line in a mangrove creek. These records indicate an earlier or more prolonged breeding season than suggested by Hume (loc. cit.), who referred to their commencing to dig their nest in the middle of May. Osmaston (1906a : 162) found 3 to 5 eggs in tunnels often 4 ft. deep.

Butler (1899 : 561) refers to one clinging to a sandy bank and picking off small beetles running about on the sand.

The call is *tre* (tray)—*tre-tre* in a musical trill.

**\*748. *Merops philippinus philippinus* Linnaeus (Philippine Islands)  
Bluetailed Bee-Eater.**

2 ♂♂ Bambooflats, S.A., 12 Nov. 1963 ; and Maymyo, S.A., 14 Feb. 1964.

Davison saw it in the Nicobars only (whence it is omitted in the SYNOPSIS), while Hume noted it in the Cocos. Butler said it was common in the Nicobars, and to be seen everywhere. Abbott and Kloss obtained 3 specimens, all males, on Camorta. Osmaston (1906a : 162) noted it as 'not common', seeing a few in March around Port Blair and on Narcondam in October. He thought they were on migration and did not stop in the Andamans. I saw it several times in open country in South Andamans, both in November and in February. There is no evidence of its breeding in the area, and it is probably a seasonal migrant from India. A bird shot in November contained dragonflies complete with wings.

**\*762. *Eurystomus orientalis gigas* Stresemann (Rutland Is., South Andamans) Broadbilled Roller.**

♂ Port Blair, S.A., 4th Nov. 1963 ; 2 ♂♂ Betapur, Middle Andamans ;

1 ♂ 15 Feb., 1 ♂, 1 ♀ 24th March 1963, Chiria Tapoo, S.A.

Hume and Davison (1874) only saw it in South Andamans. I found it quite common both in South and Middle Andamans. It is not so much a bird of the open country as the Indian Roller (*Coracias benghalensis*) and, when perched on high trees on the edge of forests, it is not easily seen. The white spots on the wings are prominent in flight. Davison (loc. cit.) saw it 'rise into the air and go through a series of fantastic evolutions, sometimes keeping up for nearly three minutes'. He added that its note was not musical and the bird was fortunately rather silent. I have already referred to mistaking it for a large nightjar at dusk. One stomach preserved was found to contain Chrysomelid

and Bupestrid beetles and grubs, crickets (Gryllidae), and bits of Mantids.

773. **Rhyticeros (undulatus) narcondami** (Hume) (Narcondam Is., Andamans) Narcondam Hornbill.

This bird is restricted to Narcondam Island, a steep jungle-covered hill rising abruptly from the sea 80 miles east of North Andamans. Very little is known of its habits. Hume (*Stray Feathers* 1 : 411) described its flight as heavy and slow. Osmaston (1905 : 620) estimated their total number at about 200 and found them noisy and fearless. Cory (*J. Bombay nat. Hist. Soc.* 14 : 372) visited the island on 22-3-1901 and found them paired, the cocks attentively feeding the hens as they sat together. The plumage of the specimens shot 'was in a draggled condition, the white tail-feathers being dirty and ragged and the whole appearance of the birds was as if they had been confined in an ill-kept aviary'.

\*831. **Dryocopus javensis hodgei** (Blyth) (Andaman Islands) Great Black Woodpecker.

3 ♂♂ Ferrarganj, S.A., Bakultala, M.A., Long Island, M.A ; 2 ♀♀ Wrightmyo, S.A.

This fine woodpecker was fairly common in forest and even seen in mangroves. The male's call is a loud chattering *kuk, kuk, kuk*, ending with a whistling *kui*. A loud sharp *kik, kik, kik* was also heard. It was also heard drumming. The flight is flapping and roller-like. It was seen to jerk irregularly in flight, also like a roller, most unusual for a woodpecker.

A very pronounced musty smell was twice noticed in a male and a female, both with enlarged gonads. Ball (1870b) refers to a peculiarly rank and offensive smell in a specimen he procured in August. My specimens measured :

	Wings	Tails
3 ♂♂	182, 188, 185	138, 140, 147
2 ♀♀	190, 188	144, 144

The male (Ferrarganj) which had enlarged testes has a black forehead as in the female. Osmaston (1906a : 162) took a clutch of 2 eggs but does not mention the date.

Among the skins in the Society's collection, one of *Dryocopus javensis* from Kadra, North Kanara, has a few of the feathers of the back faintly tipped with red.

\*846. **Dendrocopus macei andamanensis** (Blyth) (Port Blair, South Andaman) Fulvousbreasted Pied Woodpecker.

2 ♂♂ Wrightmyo, S. A., and Bakultala, M. A. ; ♀ Pochang, Shoal Bay Creek, S. A.

This small woodpecker was common in wooded areas in both South and Middle Andamans, either singly or in pairs. Like many other

woodpeckers, it can reverse down the trunk and is sometimes within a few feet of the ground. It was also noted perched across a branch.

Osmaston (1906a : 161) found many nest holes on the underside of branches of avenue trees mostly *Pithecolobium saman*, but offers no additional information.

870. *Pitta sordida abbotti* Richmond (Great Nicobar) Hooded, or Greenbreasted, Pitta.

Hume saw a pitta with a great deal of blue about it at Galatea Bay, Great Nicobar, and thought that it might be *Pitta molluccensis*. The subsequent discovery of this bird by Abbott and Kloss no doubt establishes its identity. This form is found on Great and Little Nicobars.

\*917. *Hirundo rustica gutturalis* Scopoli (Philippines) Swallow.

This swallow is common in the Andamans and Nicobars from September to May, young birds being far more numerous than adults (Butler). I saw parties, hawking over rice-fields etc. or settled on wires, several times in a 60-mile drive from Wrightmyo to Port Blair and back; also at Bakultala, Middle Andamans, and on Car Nicobar. One shot on 11th February had a 107 mm. wing.

\*920. *Hirundo tahitica javanica* Sparrman (Java) House Swallow.

Hume (1874 : 155) suggested that it was a monsoon visitor to the Andamans, being found only from June to end-September. Butler (1899 : 557) found it a common resident breeding in verandahs and outhouses. It was not recorded from the Nicobars, where he thought he saw one.

Earlier (*J. Bombay nat. Hist. Soc.* 11 : 736) he reported a pied specimen of this species obtained near Port Blair. Osmaston (1906a : 161) found 3 nests with hard-set eggs in caves on the shore of North Button Island on 5th May.

I think I saw this more than once in South Andamans, but always when busy with something else more important and so failed to secure specimens or to make quite sure of their identity.

949. *Lanius cristatus cristatus* Linnaeus (Bengal) Brown Shrike.

I took 3 specimens, one with a brown head and two with grey heads, assuming that the first was of this form and the others of the next—both were noted in the field, roughly in the ratio of 1 to 5 or 6. I was apparently mistaken, for the specimen taken does not have the rich brown on the upper parts exhibited by specimens of *C. cristatus*. It would therefore appear to be an immature stage of *lucionensis*, though

the barring on the underparts is no more pronounced than in the adults. This identification has been confirmed by Dr. Ripley to whom the specimen was sent.

Hume said it was rare in the Andamans, only two of 32 shrikes collected being *cristatus*. Later it became more common and he received 8 killed in June, July, August, and September, indicating a migration.

\*950. *Lanius cristatus lucionensis* Linnaeus (Luzon) Brown Shrike.

1 ♂? Mannarghat, S. A. ; 1 ♂ Wrightmyo, S. A. ; 1 ♀ Chiria Tapoo, S. A.

This bird was common in suitable localities in South and Middle Andamans, together with the brown form referred to under *cristatus*.

I saw no evidence of its breeding in the Andamans and also heard no call. Osmaston (1906a : 157) calls it a seasonal visitor, arriving in September and leaving in April. Richmond (1903 : 291) notes a specimen from Car Nicobar.

\*956. *Oriolus chinensis andamanensis* Tytler (South Andamans) Blacknaped Oriole.

3 ♂♂ Wrightmyo, S. A. ; 1 ♂ Bakultala, M. A., and 1 ♂ Guitar Island, M. A. ; 1 ♀ Long Island, M. A.

This bird was common in most places in South and Middle Andamans.

During the earlier part of the trip, I syllabilized the call as *jug-jeevan* and thought it was very true. Later at Long Island, where the bird was quite common, its call was different and I never heard *jug-jeevan* !

5 males from South and Middle Andamans, including one in immature plumage, have their wings 130-140 mm. (av. 136.2), tails 90-104 (av. 97.8), and bills 29-31 (av. 30), while one female measures 133, 90, and 31 respectively. The nape patch in male No. 133 is 12 mm. broad, i.e. as in the Nicobar bird, but the other measurements are in keeping with those of this race.

Butler found nests on 19th May and 1st June, the former containing a large young and the latter 3 hard-set eggs. The second nest was much larger and more solid than the first, almost double in size. Osmaston (1906a : 158) noted them breeding from April to June. The nest, he said, was usually decorated outside with sprays of a small climbing Asclepiad with orbicular leaves.

957. *Oriolus chinensis macrourus* Blyth (Nicobar Islands) Black-naped Oriole.

♂ ♀ Car Nicobar : wings 154 and 151 ; tails 110 and 112 ; bills 30 and 33.

It was common on Car Nicobar, being noticeably larger and having a longer tail, than the Andaman bird. It looked rather out of place in

coconut groves. Butler (1900, p. 396) said it was extremely abundant throughout the islands. I thought the call (which Butler terms a long drawn, modulated whistle, sounding like 'pee-u') was also quite different from that of the Andaman bird, and have it written as *chee-e op.*

**Oriolus xanthornus** subsp. Blackheaded Oriole.

♂ Wrightmyo, S. A.: wing 131, tail 86, culmen 28.

They appeared common at Wrightmyo, and I noted several on North Button Island on 29 February.

Davison, who failed to see this species in December/January, but noted it in April and May, thought it was a migrant. Hume writing at the same time (1874 : 230) and Butler (1899 : 396) thought otherwise, their opinion being supported by specimens obtained, or birds seen, from March to September. Osmaston (1906a : 158) stated it was not uncommon in the hot weather, but he saw none in the winter.

Ripley (SYNOPSIS) says it is of the typical race (type locality : Chandernagore) and goes to the Andaman Islands in summer. My single specimen is too small for *xanthornus* and agrees in colour and size with *ceylonensis* Bonaparte. Whistler (*J. Bombay nat. Hist. Soc.* 36 : 585) said that Andaman birds appeared to be smaller than the Ceylon form, but did not express any further opinion as it was believed to be a migrant [see also Walden (1874c : 138)]. I am for the moment leaving this bird trinomially unnamed.

**Dicrurus leucophaeus** subsp. Grey Drongo.

Capt. Wimberley sent Hume a specimen obtained on 5 November (1874 : 210). Later (1876 : 289) he said it was *leucogenys* Walden.

[970. **Dicrurus annectans** (Hodgson) (Nepal) Crowbilled Drongo.

Under *D. balicassius* (Linnaeus) Blyth (*Journ. Asiatic Soc. Bengal* 1846 : 30) wrote that a specimen of this common Malayan species was obtained by Capt. Lewis when nearing one of the Nicobar Islands. This is later repeated by Hume. This species is migratory and passes through portions of Burma in large numbers, presumably into Malaya. In view of the doubts expressed regarding the origin of birds obtained by Capt. Lewis, it may be best to omit it from the Nicobar list until re-confirmed.]

974. **Dicrurus andamanensis dicruriformis** (Hume) (Great Coco and Table Island) Andaman Drongo.

Ripley (SYNOPSIS) restricted this form to Great Coco, Table, and North Andaman Islands, while *andamanensis* described from Port Blair was said to occur on South Andamans only. The intermediate area

(Middle Andamans) is occupied by an intermediate form as indicated under *D. a. andamanensis*, below.

\*975. *Dicrurus andamanensis andamanensis* Tytler (Port Blair) Andaman Drongo.

5 ♂♂ Port Blair, 14 Nov. 1963; Ferrarganj, S. A., Chiria Tapoo, S. A., Bamboo-flats, S. A., Long Island, M. A.; 2 ♀♀ Mannarghat, S. A., Long Island, M. A.

I saw this species common in forested areas in South and Middle Andamans. A party of 7 to 8 was seen together in a forest clearing. One clung to the smooth trunk of a high tree like a woodpecker, released its hold, and clung again higher up. The call was a long *tseep*. It also had some ringing notes typical of the drongos.

Wardlaw Ramsay (*Stray Feathers* 2: 211) noted it going up a tree like a woodpecker. Oates, in the old FAUNA, said it was highly gregarious, flocks of half a dozen to twenty travelling through the forest in search of food, either by themselves or in company with *Irena puella*, *Sturnia andamanensis*, *Graucalus dobsoni*, *Pericrocotus andamanensis*, etc. Osmaston (1906a: 156) found it breeding from the middle of April to the middle of May.

The 5 males collected have their wings 134, 135 (2), 136, and 142 mm., the last being from Long Island, the northernmost point of my trip. Stuart Baker held that birds with wings under 140 mm. were of this race, while those over 140 were *dicruriformis* Hume.

Two females from South and Middle Andamans have wings 128 and 131 mm., indicating that they are smaller than the males, though Hume (*Stray Feathers* 1: 408-9) when describing the larger race *dicruriformis* appears to have measured both sexes together.

\*980. *Dicrurus paradiseus otiosus* (Richmond) (Andamans) Greater Racket-tailed Drongo.

2 ♂♂ Long Island, M. A., Port Blair, S. A. (18 March 1964); 3 ♀♀ Wrightmyo, S. A., Mannarghat, S. A., Long Island, M. A.

Tolerably plentiful in suitably forested areas. It has the same range and variety of calls as the Indian race. Osmaston (1906a: 157) said it bred in May, building its nest generally high up on the more or less inaccessible branches of big trees.

The subspecies *grandis* (Gould) was separated because of its long crest. Sálim Ali in 'Birds of Gujarat' (*J. Bombay nat. Hist. Soc.* 52:800) specially drew attention to the short crest of the birds collected in the Surat Dangs and other places in Gujarat and identified them as *malabaricus* (Latham). Ripley in the SYNOPSIS has included Gujarat in the range of *grandis* and synonymized *malabaricus* with *paradiseus* of which the type locality is in Thailand.

981. **Dicurus paradiseus nicobariensis** (Baker) (Kondel, Nicobars)  
Greater Racket-tailed Drongo.

This species is apparently scarcer in the Nicobars than in the Andamans (Davison & Hume 1874 : 213), though Butler (*J. Bombay nat. Hist. Soc.* 12 : 392) refers to both races together and notes them as fairly common in both the Andamans and Nicobars.

\*983. **Artamus leucorhynchus humei** Stresemann (Andamans) Swallow-Shrike.

1 o ? Wrightmyo, S. A., 1 ♂ Wrightmyo, S. A., 2 ♀♀ Wrightmyo, S. A.,  
and Bakultala, M. A.

The Swallow Shrike was commonly seen in open country over paddy-fields and in rubber. Their habits are very similar to those of the Indian species, *fuscus*, though they appeared to settle more often on the ground and to be generally tamer in disposition. They huddled closely together on horizontal branches, both to roost at night, and during the day.

Butler saw it following the plough, alighting among the newly-turned clods of earth in search of insects exposed, and moving on the ground in short hops. He also saw them settle on the roofs of houses. He said he had frequently killed a flying bird with a catapult !

Davison found a nest, still empty, on 2nd May and Butler saw newly-fledged young sitting about in trees in May.

Osmaston (1906a : 157) found them breeding in April and May, the nests being almost invariably placed on the broken-off stump of some stout branch 10 to 20 ft. from the ground. The nest was an untidy shallow saucer of twigs little better than that of a dove, and exposed to view from above, and more or less also from below.

On 27 February on Long Island I saw two pairs collecting grass from a drying lawn outside the Divisional Forest Officer's bungalow, settling on the ground to do so. The nest was being built in a hole (?) in the top of a dry vertical branch, 3-4 in. in diameter, in a gigantic *gurjan* some 200 ft. up and 300 yards distant. The other was in the fork of a tree, about 20 ft. from the ground, and only about 50 yards away. I saw two birds on a branch 20 ft. from the nest, displaying to each other, both rotating their expanded wings. One then sidled up to the other which flew to the nest post.

The call is of the same type as that of the Indian bird but softer.

This bird is found in the Andamans, and on Great Coco and Table Islands.

\*986. **Aplonis panayensis tyleri** (Hume) (Andamans) Glossy Tree Stare.

3 ♂♂ Wimberleyganj and Mannarghat, S. A., Long Island, M. A. ; 1 ♀ Maymyo, S. A. ; 2 ♀♀ Car Nicobar ; 1 ♂, 1 ♀ Nancowry Island, Nicobars.

This was common in the South and Middle Andamans and also at

Car Nicobar, both in pairs and in parties, large and small. Large flocks of several hundreds, flying to the tops of trees created a spotted appearance thereon. Very few streaked young were noted in the Andamans, while they appeared common on the single day's trip to Car Nicobar.

In early February, they appeared to be preparing to breed, a male shot on the 11th showing enlarged gonads, and two birds were seen contending for a nest hole high up in a tree about the same time.

Osmaston (1906a : 158) found them exceedingly numerous from about February till June, but could not ascertain where they went for the rest of the year. Tytler (1867 : 330) obtained young in August.

The specimens are not enough to permit any definite conclusions, but the 3 adults from the Andamans show noticeably more of the greenish gloss on their upper parts than those from Car Nicobar. A female from Nancowry in immature plumage (with spotted underparts) is also less green above than a similar male from the Andamans which is almost as green as the adult. The last specimen is also more heavily spotted on the underparts than the other.

Hume (*Stray Feathers* 1 : 481) referred to great variation in the colour of the irides in adults, varying from white, opalescent white, fleshy white, and pale pink to brown, deep brown, deep red-brown, and deep orange. This was on the basis of sixty specimens 'from almost every island in both groups'. It is interesting to note that Abbott and Kloss (in Richmond, 1903) found that the birds from Car Nicobar had brown irides, while all from the central group, Trinkut etc., and Great and Little Nicobar, had them white.

\*990. *Sturnus erythropygius andamanensis* (Tytler) (Andamans) White-headed Myna.

2 ♂♂ Chiria Tapoo, S. A., and Long Island, M. A. ; 2 ♀♀ Wrightmyo, S. A., and Bakultala, M. A.

This myna was as Butler noted one of the commonest birds in the Andamans. I also saw a pair on North Button Island. Butler notes that they work through the forest in company with Racket-tailed Drongos, Minivets, and Cuckoo Shrikes. He also said that it was partial to 'a small caterpillar which rolls itself up in the narrow leaves of the bamboo, and flocks may be seen hanging in all sorts of tit-like attitudes diligently opening every rolled-up leaf with varying results, the little shelter not being always tenanted'.

In the forested areas it keeps to the trees, though it is possible, as Butler recorded, that it feeds a good deal on the ground in paddy fields. When seen at eye-level the pale back is noticeable, and my first impression of a large flock was of rosy pastors. Osmaston (1906a : 158) took nests at the end of April and in May. The nests with 4 eggs were in holes in trees from 6 to 30 feet high, and 'composed of small



pliant twigs with an occasional stiff feather, and lined with small green leaves'.

\*991. *Sturnus erythropygius erythropygius* (Blyth) (Car Nicobar)  
Whiteheaded Myna.

1 ♂, 2 ♀♀ Car Nicobar.

It was common on Car Nicobar and did not appear to vary in habits from *S. e. andamanensis*. At the time of Hume's trip it was believed to be a very rare species, only one specimen being obtained though Butler found it common.

992. *Sturnus erythropygius katchalensis* (Richmond) (Katchal Is.,  
Nicobars) Whiteheaded Myna.

Richmond (1903 : 293) while describing this race from Katchal Island refers to Hume some thirty years earlier mentioning *andamanensis* being introduced at Kamorta, and suggests that the population on the adjacent island of Katchal is a hybrid between *andamanensis* and *erythropygius*. Ripley (1961 : 297) agrees with this possibility. It differs from *erythropygius* in the smaller measurements and the pale rump and upper-tail coverts of *andamanensis*, but has the under-tail coverts as in *erythropygius*.

995. *Sturnus sturninus* (Pallas) (Dauria) Daurian Myna.

Hume (1874 : 251) refers to 2 shot out of a flock of 70-80 at Camorta, and a third flew on to the boat between Little Andamans and Nicobars. They were all in immature plumage. Hume did not appear quite sure about their identification.

996. *Sturnus roseus* (Linnaeus) (Lapland, Switzerland) Rosy Pastor.

Tytler made a general statement that 'it arrives in flocks in January' (in the Andamans). Several later observers failed to see this species and Tytler's observations were treated with doubt. Osmaston (1906a : 158) however saw two flocks in March and April and obtained three specimens. He suggested it was possible that they visited the Andamans only in very severe winters.

1006. *Acridotheres tristis tristis* (Linnaeus) (Pondicherry) Indian  
Myna.

1 ♀ Wrightmyo, S. A. : wing 130.

This bird was introduced by Col. Tytler at Ross Island. When Hume visited the place (1873), he said that they had thriven and multiplied greatly but not crossed over to Port Blair which is not more than a quarter of a mile away. By Butler's time (1900) it was one of the commonest birds at Port Blair, being very abundant wherever there was cultivation and roosting in hundreds in clumps of bamboos. Now, they are common in suitable areas throughout the South Andamans, but I

did not notice any large flocks. Butler said they had been introduced at Camorta, where he saw some, as did Abbott and Kloss, who also noted them at Nancowry Harbour.

Though the FAUNA states that the wings of the typical race measure 140-149, there are several smaller specimens in the Bombay collection.

[*Acridotheres fuscus* from Burma was also introduced by Tytler, but there is no evidence of their subsequent survival.]

\*1018. *Gracula religiosa andamanensis* Beavan (Andamans) Hill Myna.

2 ♂♂ Betapur, M. A.; 2 ♀♀ Wimberleyganj and Bambooflats, S. A.; 1 ♂ Port Blair 17 March 1964.

I found it common in most places in South and Middle Andamans, and it is said to be found all over the Nicobars too. An albino was obtained in the Nicobars (Blyth, 1863b). Hume refers to their being perfect mimics and being sold at Calcutta at Rs. 3 to Rs. 5 against 4 to 8 annas at Port Blair. Osmaston (1906a : 158) said the trade was forbidden.

Three males from the Andamans have their wings measure 174, 166 and 165 mm. against 183 (Little Nicobar) and 170.5 and 177.5 (Katchal) mentioned by Richmond (1903 : 292).

\*1040. *Dendrocitta bayleyi* Tytler (Andamans) Andaman Tree Pie.

3 ♂♂ Wrightmyo, S. A., Bakultala, M. A., and Chiria Tapoo, S. A.; 3 ♀♀ Wrightmyo (2) and Chiria Tapoo.

I saw this small tree pie in South and Middle Andamans and got the general impression that it was not common. However, I saw several parties, and the fact that as many as 22 flew out of a tree suggests that they are not really very scarce. They were seen together with Racket-tailed and Andaman Drongos. In flight it looks more like a drongo than a tree pie, its thin body showing only as a streak in silhouette. Parties broken up into twos and threes kept together, flying and turning in the air in formation.

Of the two females collected on the same day, one had olive-green irides and the other bright yellow. Butler (1899 : 390) said that the young start with an olive-green iris, changing in a short time to bright green. An inner circle of golden yellow then appears and gradually encroaches on the green until the beautiful clear yellow eye of the adult is attained.

Eggs were taken near Port Blair in March and April (FAUNA 1 : 56).

\**Corvus macrorhynchos andamanensis* Tytler (Port Blair, Andamans) Jungle Crow.

1 ♂ Middle Button Island; 1 ♀ and 1 o? Wrightmyo, S. A.

This crow was seen at all camps in South and Middle Andamans,

Two specimens shot on 11th February showed no signs of breeding but one bird was seen carrying a stick to a coconut palm on the 15th.

Osmaston (1906a : 156) found them breeding in March, frequently on coconut palms. Beavan (1867) said : ' It is abundant in large flocks and formerly fed entirely on the seashore . . . but now frequents houses and barracks for offal '. The tendency to congregate in flocks is said to be very different from that of Indian birds. I did not notice any large flocks.

The Jungle Crows from the Andamans were named *andamanensis* by Tytler and were said to be (Ball, *Stray Feathers* 1 : 74) quite distinct from *C. culminatus*, being ' nearer *intermedius* of the Northwest Himalayas, but slightly larger than that species '. Blyth said the specimens seen by him were *culminatus*, while Beavan, who was inclined to agree with Col. Tytler, noticed that the call was quite different. Hume (*Stray Feathers* 5 : 461-469) examined 70 skins from the Indian region and, considering sizes of wing, culmen, tail, and tarsus, shape of tail, green or purple gloss, and white and non-white base of feathers, came to the conclusion that *culminatus*, *intermedius*, *levaillanti*, and *macrorhynchos* were not separable as species. Blanford (FAUNA 1 : 17) included *andamanensis*, *intermedius*, and *culminatus* under *macrorhynchos*, but mentioned that the smallest birds occurred in the north-west Himalayas and the largest in the Andamans and Burma. Stuart Baker (FAUNA 1 : 29) accepted *andamanensis* from the Andamans, Burma, and north and west Siam on their larger size (♂ wing 304-345, av. 325 ; ♀ 290-321) and larger bills (never under 58, generally over 60, and running up to 70). He said that in all the island adults the bases to the feathers are very pure white, whereas in the Assam and Burmese birds they range from almost pure black to more than equally pure white. Northern birds had more white than southern, ' but even this is only a question of degree in average '. Stanford & Mayr (*Ibis* 1940 : 695), reporting on the Vernay Cutting Expedition to northern Burma, referred to birds from the Andamans (*andamanensis*) having male : wings up to 340 mm. and female : up to 325 mm., bill slenderer, nape feather bases white, and being probably identical with birds from Lower Siam and the Malay Peninsula, and intermediate between *levaillanti* and *macrorhynchos*. Ripley (1961) accepts *intermedius*, *levaillanti*, *tibetosinensis*, and *culminatus* from the region but omits *andamanensis*, making no statement as to what form is found in the Andamans.

Upon arrival at Port Blair, it was immediately noticeable that the call of the Andaman bird was different from that of the Jungle Crow with which I am familiar, *culminatus*, being plaintive and less harsh.

The 3 specimens obtained, one ♂ (wing 320, tail 195), one female (287, 168), and one unsexed (probably female, wing 287, tail 167), are very black above and below and with little gloss, and the male is

too large for *culminatus*. Hume (1874 : 243) said that, sex for sex, the Andaman birds had a longer bill than any continental race. This difference is not visible, and the bills of the three specimens vary in shape among themselves. The nape feather bases of the male are dark grey [as in all the specimens of *culminatus*, *intermedius*, *levaillanti*, and *tibetosinensis* available in Bombay (except a male from Chitral)], while the two smaller birds have them white. This difference shows an affinity with *macrorhynchos*. It is apparent that the over-all position regarding the geographical variations of this common bird are still far from completely understood and, though I cannot express any definite opinion with the series available here (Blanford examined 300 at the British Museum!), I think it advisable to retain my specimens as *andamanensis*.

Davison (Hume 1874 : 244) refers to a few taken from Port Blair and turned loose on Camorta, and on the adjacent island of Trinkut in the Nicobars. Later (*Stray Feathers* 3 : 325) Hume, while dealing with birds from Tenasserim, says their bills are about the same as those of Nicobar birds, while the wings are perhaps somewhat larger. I have not seen any other reference to their occurrence in the Nicobars, and can only assume that this is a slip for the Andamans.

[*Corvus splendens* Vieillot, introduced by Col. Tytler for sanitary purposes, does not appear to have thriven or multiplied (Beavan, 1867 : 329).]

\*1075. *Coracina novaehollandiae andamana* (Neumann) (Andaman Islands) Large Cuckoo-Shrike.

2 ♂♂ Wrightmyo, S. A., and Long Island, M. A. ; 1 ♀ Betapur, M. A.

Butler said it was common in the neighbourhood of Port Blair, where clearing and cultivation had made the country open enough for its liking. Osmaston (1906a : 157) found nests on 14th May and 4th June, both with 2 fresh eggs. I did not find it common, though I saw it on both South and Middle Andamans. It does not occur in the Nicobars.

\*1076. *Coracina striata dobsoni* (Ball) (Andamans) Barred Cuckoo-Shrike.

1 ♂ ? (wing 169), 1 ♀ (158) Wrightmyo, S. A.

I obtained two specimens at Wrightmyo, South Andaman. One of them had flown in from the mangrove late in the evening and settled high in a tree on the edge of forest.

Butler stated that this species was common in forests, where it was quiet, associating with mynas, minivets, drongos, etc., which roam

through the jungle in company. He also referred to a rather pleasing short song and the absence of the noisy whistling cry of the Large Cuckoo Shrike.

The FAUNA (2 : 346) gives the male wings as 153-166 and female 151-160, while Richmond (1903 : 292) measures a Nicobar male 170 mm. and a female 172.5.

**Lalage nigra davisoni** Kloss (Nicobar Islands).

Davison (Hume 1874 : 202) found it not uncommon about the settlement at Camorta, in small parties of five or six or in pairs, in low scrubby undergrowth, feeding close to the ground. They were not shy and he shot two or three from the same tree.

This species is omitted from the SYNOPSIS.

\*1080a. **Pericrocotus flammeus andamanensis** Beavan (Andamans)  
Scarlet Minivet.

3 ♂♂ Wrightmyo, S. A. : wing 93, 93.5, 96 ; tail 91, 87, 88 :  
1 ♀ Pochang, Shoal Bay Creek, S. A. : wing 92, tail 93.

The largest male (wing 96, tail 88) had grey on the upper back and nape, flecks of scarlet on the forehead, and the chin mottled irregularly with black and orange. The black extending over the whole length of the central tail feathers is a distinctive character.

Osmaston (1906a : 157) noted it as fairly common, frequenting the crowns of trees in small parties.

Butler noted a single male of *P. cinereus* Lafr. with a party of *andamanensis*. He shot the bird but did not preserve it as it was badly damaged. This has been omitted by subsequent workers.

\***Pericrocotus cinnamomeus** subsp. Little Minivet.

2 ♂♂ Wimberleyganj, S. A., and Long Island, M. A. ; 3 ♀♀ Wimberleyganj, S. A. (2) and Long Island, M. A.

I saw this quite often in South and Middle Andamans. Butler (1899 : 394) said : ' Parties of this bird are extremely regular in their habits, working their way to new roosting places, along the same line of trees, night after night . . . . . I have several times seen a whole party flutter down after a shot bird (dead or living) and remain several seconds by it on the ground, moving with very short hops.' He added that they bred from May to July; a pair was watched nest building on 15 July, the female doing all the work with the male keeping within a yard of her all the time. Osmaston (1906a : 157) found several nests in May and June.

The SYNOPSIS includes birds from the Andamans in the range of *viduus* Stuart Baker (type locality Attaran River, Amherst District,

Burma; restricted by Deignan to Pabyouk, 22 miles south-east of Moulmein).

There is only one specimen from Burma (Maymyo) in the Bombay collection and this has a grey chin against dark, almost black, in the 2 males from the Andamans. The whole of the lower plumage in the latter is also washed with orange-red and compares well with specimens from Badrana, Barkot, Keonjharhad, Simlipal Hills, in Orissa, which appear to be listed under typical *cinnamomeus* in the SYNOPSIS. In addition to these differences and similarities, the bill of one Andaman male is heavier than in any of the other specimens in the Bombay collection.

**\*Irena puella andamanica** Abdulali (Long Island, Middle Andamans)  
Fairy Bluebird.

5 ♂♂ Wrightmyo, S. A. (2), Bakultala, M. A. (2), Long Island, M. A.; 1 ♀ Wrightmyo, S. A.

I found it in all forested places in South and Middle Andamans and, as noted by Hume (1874 : 226), the number of females appeared to preponderate over the males in adult plumage to a remarkable degree—while he saw one male to 4 or 5 females, my impression was one in 20 (as also Butler's).

They were often seen in parties of 15 to 20 birds, on trees and bushes bearing berries on which they fed, e.g. *Phyllanthus columnaris*. The birds would all arrive at the bush together and then fly away after a few minutes, apparently doing a *chukker* in company. A loud *pit-pit-pit* was often uttered. Males in adult plumage were often seen alone in heavy forest.

Hume (loc. cit.) referred to young being out in April and Butler states that two males shot on 9th June were breeding. They have been recorded from both groups of islands and there is evidence of some form of local migration. Osmaston (1906a : 156) found it numerous around Port Blair from September to March, but did not find a nest and rarely saw it between April and August.

**\*1113. Pycnonotus atriceps fuscoflavescens** (Hume) (Port Mouat and Mt. Harriet, South Andamans) Blackheaded Bulbul.

5 ♂♂ Wrightmyo, S. A. (3), Bakultala, M. A., Port Blair, S. A.  
(17th March); 2 ♀♀ Wrightmyo, S. A., Bakultala, M. A.

This bulbul was not common but, as Butler noted, is a quiet unobtrusive bird keeping to heavy jungle. I saw it at all camps and the position must be different from what it was when Davison and Butler collected—the former obtaining 8 specimens in six months and the latter not seeing it more than a dozen times in eight months. Osmaston (1906a : 156) also said it was decidedly rare, seeing it half a dozen times in 15 months.

\*1122. *Pycnonotus jocosus whistleri* Deignan (Cinque Island, south of South Andaman) Redwhiskered Bulbul.

1 ♂, 3 ♀♀ Wrightmyo, S. A.; 1 ♂, 2 ♀♀ Nancowry, Nicobar.

This bird was common in South and Middle Andamans, in the more open country. It was introduced into the Nicobars, where Hume saw it on Camorta. Osmaston (1906a : 156) said at Port Blair they frequently entered houses, taking the place of the Common Sparrow. He said they bred from March to May laying 2 or 3 eggs only. Richmond (1903:289) said that they differed from Indian and Malayan examples in being rather darker and browner above, with more extensive white tips on the rectrices, but did not specify which of the several races he compared them with.

As Walden noted in 1873, this form is barely distinguishable from *emeria* from Vizagapatam, Orissa, and Bastar, though the red ear-tuft and the crest are on an average shorter and the bills heavier.

\*1142. *Hypsipetes nicobariensis* Moore (Nicobars) Nicobar Bulbul.

1 ♂, 1 ♀ Nancowry Island, Nicobars, 14 March 1964.

This bird is restricted to the Nicobars, where it is not found on Car Nicobar (Butler). Shekar obtained two during a short trip to Nancowry Island. Both had their gonads under. Davison reported it as common in the Nicobars, keeping to forests but sometimes in gardens. He saw them singly, in pairs, or in small parties of 5 to 6. Abbott & Kloss (in Richmond 1903:289) said they 'occasionally congregate in assemblies of 50 or more in some large tree, where they make a great chattering and uproar'.

1402. *Rhinomyias brunneata nicobarica* Richmond (Great Nicobar) Olive Flycatcher.

Abbott & Kloss found it common on Great and Little Nicobar. They kept close to the ground in low bushes in heavy forest and had a 'rather sweet song'. Ripley (1961 : 419) states that the breeding range of this form is unknown and it may be resident in the Nicobars.

\*1407. *Muscicapa latirostris* Raffles (Sumatra) Brown Flycatcher.

2 oo ? Betapur, M. A., Bambooflats, S. A., 20 March, 1964 ;

1 ♀ Long Island, M. A.

This is a winter visitor to the Andamans only, apparently in some numbers, for we saw it at all camps.

1464. *Terpsiphone paradisi nicobarica* Oates (Nicobars) Paradise Flycatcher.

Though it occurs in both the Andamans and the Nicobars, we did not see it. Davison saw white and red birds but said it was rare in both the

groups. Abbott & Kloss did not see it on Car Nicobar or Tillangchong, but found it fairly common on all the other islands of the Nicobars. They noted adult white males on Great and Little Nicobar.

\*1467. *Monarcha azurea tyleri* (Beavan) (Port Blair, Andamans)  
Blacknaped Flycatcher.

3 ♂♂ Bakultala (1), Long Island, M. A. (2) : wings 72-75, av. 73.3 ;

2 ♀♀ Wrightmyo, S. A. (1), Long Island, M. A. (1) : 2 ♀♀, 71-73, av. 72.

This flycatcher, seen at all camps in South and Middle Andamans, is said to extend to Great and Little Coco (SYNOPSIS). Osmaston (1906a : 159) found many nests between 8th April and 1st June, which were invariably decorated with white spider egg-cases.

The underparts of the male are bluer than in Indian birds. This colour extends to the vent, replacing the white in Indian and Nicobar birds.

\*1468. *Monarcha azurea idiochroa* (Oberholser) (Car Nicobar) Blacknaped Flycatcher.

2 ♀♀ Car Nicobar : wings 73.5 and 74 mm.

The white belly separates this from the Andaman birds. This form is presumably restricted to Car Nicobar.

1469. *Monarcha azurea nicobarica* (Bianchi) (Nancowry) Blacknaped Flycatcher.

This form, said to be slightly larger than the last, replaces it in the other islands of the Nicobar Group. I have not seen any specimens.

\*1470. *Pachycephala cinerea cinerea* (Blyth) (Ramree Island, Arrakan)  
Mangrove Whistler.

[*Muscitrea grisola grisola* (Blyth) in FAUNA]

1 ♂ Long Island, M. A.

Osmaston (1906a : 159) found it throughout the Andamans, but not common though fairly numerous in open jungles and clearings near Port Blair. He said : '[It has] a fine loud and clear whistle, repeated three or four times or prolonged and drawn out, followed suddenly by a higher (or lower) note in a different key, reminding one somewhat of the call of *Aegithina tiphia* and unlike that of any flycatcher. It is a quiet and unobtrusive bird usually seen alone or in pairs. It frequents mangroves and other small trees and catches insects sometimes on the wing and at other times on the branches or trunks of trees.'

He found it breeding in May and June, and took 5 nests with 2 eggs each between 17 May and 10 June. The nest was a thin, flimsy cup-shaped structure attached by means of cobwebs to the twigs supporting it 5 to 12 feet from the ground.



Abbott & Kloss (Richmond 1903 : 295) obtained six specimens from Henry Lawrence Island, Barren Island, South Andaman, and Cinque Island. Curiously, others found it scarce, Butler seeing it only once. The only specimen we obtained was shot by Shekar on Long Island, Middle Andamans.

1475. *Cettia pallidipes osmastoni* (Hartert) (Andaman Is.) Bush Warbler.

Butler shot one in dense undergrowth on top of Mt. Harriet, South Andaman. Osmaston (1906a : 157 and 1933 : 892) said they were adept skulkers and common in dense undergrowth of high or secondary forest, but never met in the open. He describes the deep cup-shaped nest as built of dry bamboo leaves, loosely put together and lined with fine flowering grass-heads supported among the stems and leafstalks of a ginger-like plant in dense jungle. The nest contained 4 eggs. He also noted the call as 'most characteristic and peculiar, of 3 or 4 notes only, loud for the size of the bird, and insistent'.

I did not meet this species and it would appear to be very localized.

\**Cisticola juncidis malaya* Lynes (Klang, Selangor, Malay State) Fantail Warbler.

1 ♂ Car Nicobar.

Davison obtained specimens in the Nicobars where, Butler said, they were common. Abbott & Kloss secured 4 specimens on Trinkut and noted them on Kamorta and Nancowry. They also saw another small bird on Great Nicobar, which they took to be some species of *Cisticola*. The specimens were not subspecifically named, but Dr. Dillon Ripley (*in epist.*) informs me that they are of this race as also the above-mentioned specimen which was sent to him.

I found them quite common at the aerodrome and in similar areas of short grass on Car Nicobar. The specimen obtained has not the streaked back of Indian birds.

Hume (1874 : 235) referred to great variations in individuals and confirmed that birds from the Nicobars are identical with those from India. This is an addition to the list in Indian literature, though the Nicobars are included in the range of this race by Chasen (1939, 4 : 327).

1542. *Locustella certhiola centralasiae* Sushkin (Khara Usu River, Khanghai, Northwestern Mongolia) Pallas's Grasshopper Warbler.

1543. *Locustella certhiola rubescens* (Blyth) (near Calcutta) Pallas's Grasshopper Warbler.

Butler has a single sight record of Pallas's Grasshopper Warbler from the Andamans and Abbott got one at Kamorta, 10 February

(Richmond, 1903 : 291), the race being undetermined in both cases. Ripley (1961 : 462) includes both races in the Andamans, mentioning that, when Sushkin (1925) described *centralasiae* [*Proc. Boston Soc. Nat. Hist.* 38(1) : 46], he referred to it as a winter visitor to the Andamans.

1544. *Locustella lanceolata* (Temminck) (Mainz ?) Streaked Grass-hopper Warbler.

This was first obtained by Davison near Port Blair and described by Hume as *L. subsignata* (1873b : 409). Davison referred to its running along the ground. Butler said it was fairly common in the Andamans in winter.

\*1549. *Phragmaticola aedon aedon* (Pallas) (Dauria) Thickbilled Warbler.

1 ♂ Long Island, M. A. : wing 81 mm.

Davison and others found it not uncommon in hedges, thickets, etc. in the Andamans and rare in the Nicobars during the cold weather. The call and alarm note a *click-click* was likened by Davison to the cocking of a very coarse-sprung musket-lock. He also heard them make 'a very good attempt at a song somewhat weak and monotonous perhaps, but very pleasing withal'.

I only obtained one specimen on Long Island on 28th February.

\*1552. *Acrocephalus stentoreus amyae* Baker. (Hessamara, Assam) Great Reed Warbler.

1 ♂ Choldhari, S. A.

On 14th February large warblers appeared to be common in grass in and on the edge of snipy country. Two were obtained, of which one is of this species and the other of the next.

Both were identified by Dr. Dillon Ripley and this is an addition to the Andaman avifauna.

There is yet no evidence of its breeding in the Andamans, and this appears to be the first indication of the migration of this form.

\*1554. *Acrocephalus orientalis* (Temminck & Schlegel) (Japan) Eastern Reed Warbler.

1 ♂ Choldhari, S. A.

The specimen was obtained in the circumstances referred to under the last species. This is said to occur in the Andamans in the SYNOPSIS but I cannot trace the original record.

\*1585. *Phylloscopus fuscatus mariae* Ripley (Moirang, Manipur) Dusky Leaf Warbler.

1 o? Bakultala, M. A. : wing 64.

As the specimen could not be identified in Bombay, it was sent to

Dr. Dillon Ripley, who has identified it as of this form; this is a new record for the Andamans. Vaurie (1954, *Amer. Mus. Novit.* 1685 : 16), who does not accept this race, refers to specimens from the Andamans, showing characters of this form, and I do not know if nominate forms should be retained for this area.

1586. *Phylloscopus fuscatus fuscatus* (Blyth) (Neighbourhood of Calcutta) Dusky Leaf Warbler.

This race is included in the Andaman avifauna in the SYNOPSIS, presumably on the basis of specimens obtained by Davison in South Andamans, and also by Osmaston (1906a : 157) who found it common in and around Port Blair in winter and said it had a sharp 'clicking' note.

1600. *Phylloscopus borealis borealis* (Blasius) (Sea of Okhotsk) Arctic Leaf Warbler.

Walden recorded one specimen from South Andamans, and two from the same area are mentioned by Oates. Kloss obtained one on Little Andaman (Richmond 1903 : 291).

1601. *Phylloscopus magnirostris* Blyth (Calcutta) Largebilled Leaf Warbler.

The single specimen obtained by Hume (1874 : 236) at Mt. Harriet, South Andamans, appears to be the only record.

\*1604. *Phylloscopus trochiloides trochiloides* (Sundevall) (Calcutta) Dull Green Leaf Warbler.

2 ♂♂ Wrightmyo, S. A., and Bambooflats, S. A. : wings 64 & 66 ; tails 49 & 50.

Hume (1874 : 236) refers to 2 specimens from Mt. Harriet and Great Coco, and Butler also said it was not uncommon in the Andamans in winter but not numerous. Abbott obtained specimens in South Andamans, which, as also the earlier records, are under the name *lugubris*. My specimens were identified by Dr. Dillon Ripley.

*Phylloscopus tenellipes* (Swinhoe) (Amoy) Palelegged Leaf Warbler.

Richmond (1903 : 291) mentions this species as captured on a boat 10 miles E. of Great Nicobar, but it is not mentioned in the SYNOPSIS.

*Erithacus svecicus* subsp. Bluethroat.

Hume (1874 : 234) refers to this bird as a winter visitor to the Andamans, but this is omitted in the SYNOPSIS.

\*1664. *Copsychus saularis andamanensis* Hume (Andamans). Magpie-Robin.

3 ♂♂ Mannarghat, S. A., Bakultala, M. A., Port Blair, 20 March ; 2 ♀♀ Mannarghat, S. A., Bakultala, M. A.

The Magpie Robin was occasionally seen near villages and in scrub

jungle in both South and Middle Andamans, but I would not call it abundant (Blyth 1863b).

It also appeared to keep nearer the ground than the Indian form, and was, on several occasions, seen among the rocks on the sea-shore, the forest in such places almost reaching the tidemark. Osmaston (1906a : 159) found a nest with 4 eggs about 6 ft. from the ground, from March to June.

The specimens differ from Indian birds in the males having the grey on the sides of the lower abdomen extending towards the white centre, the wing quills darker (more sheen), and the bills of both sexes heavier. The females also have more sheen on the upper plumage.

1668. *Copsychus malabaricus albiventris* (Blyth) (Andamans) Shama.

(Colour plate in *Ibis* 1873, p. 313).

I did not find this bird. Hume (1874 : 232) said it had 'no voice, no ear and not the faintest conception of singing', to which Davison added : 'it gives utterance to a series of hoarse sounds which would appear to proceed from a bird the size of a crow and perhaps of the same family'.

Osmaston (1933 : 891) said they were common in all the densely forested portions of the larger and smaller islands, frequenting ravines near water. They were also said to have some fine loud clear notes, as well as some harsh ones ; tame birds copied tunes whistled to them with great accuracy, one even reproducing 'Way down upon the Swanee River'. He found 7 nests between 21st May and 27th June, all at a height of 5-8 ft. from the ground (1906a : 160).

1697. *Saxicola torquata indica* (Blyth) (Calcutta) Stone Chat.

Davison and Hume (1874 : 233-234) both saw and obtained specimens in South Andamans, though it was noted as rare. Hume (1873 : 307) refers to a very long, broad, and conspicuous whitish superciliary streak.

Osmaston (1906a : 159) saw it once in March near Stewartganj. This would of course only be a winter migrant. Ripley in the SYNOPSIS mentions it from the Andamans, but adds 'record needs confirmation' (?).

1726. *Monticola solitarius pandoo* (Sykes) (Ghauts, Dukhun) Blue Rock Thrush.

Blyth listed a specimen from the Andamans (1863) and Hume and Davison did not meet it, though one was killed on Ross Island and apparently preserved by the latter. Von Pelzeln is also reported to have obtained a young male at Car Nicobar on 24th February. There do not appear to be any more records, and Ripley (SYNOPSIS) states that the race needs confirmation.

1732. *Zoothera sibirica sibirica* (Pallas) (SE. Transbaicalia) Siberian Ground Thrush.

A single specimen sent by Capt. Hodge to the Asiatic Society of Bengal from Port Blair in March 1860 and described by Blyth as a new species, *inframarginata*, remains the only record (Hume 1874 : 223).

1735. *Zoothera citrina andamanensis* (Walden) (Andamans) Orange-headed Ground Thrush.

1 ♂? Bakultala, M. A.

This is a great skulker, living in heavy forest. I saw it only on the ground and when disturbed it flew away low and not up into trees as one would expect the Indian birds to do. Butler (1899 : 556) found eight nests, newly built (2), with eggs (4), and young (2) on 16th May, all within a hundred yards of each other. Osmaston (1906a : 160) noted it as common at Port Blair, and found many nests in small trees just outside the forest in May and June. He also noted a 'pretty characteristic song'.

Walden (1874a) when naming the species only says it is different from the Nicobar species, with no description.

1736. *Zoothera citrina albogularis* (Blyth) (Nicobars) Orangeheaded Ground Thrush.

Abbott obtained specimens from Trinkut, Nancowry, Kamorta, and Katchal, where he said they frequented the darkest parts of the jungle, keeping close to the ground.

1762. *Turdus obscurus* Gmelin (Lake Baikal) Dark Thrush.

Blyth (1863) listed a specimen from the Andamans, Butler (1899:555) shot a female on 14th May, and Osmaston (1906a : 160) saw a solitary individual on 4th April. It is a rare straggler to the Andamans only.

1857. *Anthus novaeseelandiae richardi* Vieillot (France) Paddyfield Pipit.

Hume (1874 : 239) found it common in the Andamans in April, securing 7 specimens, and saw it as late as 12th May. He did not see it in the Nicobars. Ripley lists it as a winter visitor to the Andamans. I did not see any pipits.

1863. *Anthus godlewskii* (Taczanowski) (Argun River, South Dauria) Blyth's Pipit.

Walden (1874c : 136) refers to a male obtained in South Andamans on 14th April, which appears to be the only record.

1864. *Anthus cervinus* (Pallas) (Siberia) Redthroated Pipit.

This is a winter visitor to the Andamans and Nicobars where Hume obtained specimens (1874 : 242) ; Osmaston on Barren Island (1908 : 358).

\*1874 *Motacilla indica* Gmelin (Malabar) Forest Wagtail.

1 ♀ Wrightmyo, S. A.

A winter visitor to the Andamans. Davison saw it on several occasions singly and in small parties. Osmaston (1906a : 161) noted it as arriving early in October and leaving in April. He refers to its wagging its tail sideways, not up and down as do the other wagtails.

The specimen was shot in heavy forest and I only saw one other, in mangrove.

\*1875. *Motacilla flava thunbergi* Billberg (Lapland) Greyheaded Yellow Wagtail.

1 ♀ Choldhari, S. A.

\*1876. *Motacilla flava beema* (Sykes) (Dukhun) Blueheaded Yellow Wagtail.

Hume (1874 : 237) secured only 2 specimens of *cinereocapilla* Savi (*borealis* Sundev. = *thunbergi*) but referred to large flocks and 26 specimens of *B. flava* (with pale slaty blue head and conspicuous white supercilium, i.e. *beema*) which he said occurred both in the Andamans and Nicobars. Richmond (1903 : 297) refers to 3 specimens from Trinkut as *flava*.

On 12th February, I saw 3 parties of small birds, which appeared to be yellow wagtails, flying over creek and mangrove at dusk, presumably to roost. The first two were high and consisted of about 200 each, while the latter flew low over the water.

Driving from Bakultala to Betapur on 23rd February, we saw Yellow Wagtails in some numbers in several places.

The single specimen secured on South Andamans on 14th February appears to be *thunbergi*, which is the only form listed for the Andamans in the SYNOPSIS, the Nicobars being completely omitted.

\*1884. *Motacilla caspica caspica* (Gmelin) (Caspian Sea) Grey Wagtail.

1 ♀ Car Nicobar: wing 79 mm., tail 73.

I saw several in South Andaman, and Hume (1874 : 237) refers to specimens killed in the first week in September, and on Preparis Island as late as 26 March.

This appears to be a regular but not very common winter visitor.

*Motacilla alba* subsp. White Wagtail.

Captains Tytler and Beavan saw this species, which is recorded as *M. luzoniensis* Scopoli by Blyth (1863b) and said to be common in cold

weather. Capt. Wimberley (Hume 1876 : 291) obtained a specimen at Port Blair in February, but it is not possible to determine its race.

\*1903. *Dicaeum concolor virescens* Hume (Neighbourhood of Port Blair) Plaincoloured Flowerpecker.

1 ♂ Wrightmyo, S. A. (wing 47 mm.); 2 ♀♀ Wrightmyo, S. A. (48 mm.), Bakultala, M. A. (46 mm.).

This flowerpecker was frequently seen on *Loranthus* sp. in high trees and also on the flowers of *Sterculia colorata*.

The male shot on 16th February had enlarged testes. Osmaston (1906a : 161) said its note was a sharp click.

\*1913. *Nectarinia jugularis andamanica* (Hume) (Andaman Group) Yellowbreasted or Olivebacked Sunbird.

2 ♂♂ ? Wrightmyo, S. A. ; 1 ♂, 1 ♀ Bakultala, M. A. bill 22, 21, 22, 18 from feathers.

Ripley (1961 : 586) has treated the three forms from the Andamans, Car Nicobar, and the Nicobars as subspecies of *jugularis*. While I am unable to comment upon this, it is noteworthy that in this form (*andamanica*), in addition to the larger bills, the males have an off plumage with a dark stripe down the chin as in *N. asiatica* and a plain-coloured forehead (glossy in the others). Ball (1880 : 406) noted it at Narcondam.

This sunbird was common in most places attending the flowers of *Loranthus* sp., *Sterculia colorata*, and the drumstick. The male obtained on 22nd February had enlarged gonads.

Butler (1899 : 559) took 2 fresh eggs on 30th May and said the nest was very similar to that of *asiatica*. He also shot breeding birds on 20th January and 7th July.

Osmaston (1906a : 161) said they breed twice in the year, first in February and again in May. The nests were hung from some twig or grass stem, often close to the ground, less frequently at some considerable height up in a shrub or tree.

\*1914. *Nectarinia jugularis klossi* (Richmond) (Great Nicobar) Yellowbreasted, or Olivebacked, Sunbird.

1 ♂, 1 ♀ Nancowry : wings 52, 50.5 ; bill 17, 17, from feathers.

During a short visit to Nancowry, Shekar obtained a male and female which are larger than the birds from Car Nicobar and may best be left in this group. The male has the forehead glossy as in *procelia*.

Boden Kloss (1903 : 133) refers to several nests of the sunbird (*Arachnothera klossi*) from mangroves overhanging water. These in shape were something like an old-fashioned net purse covered with lichen, and were suspended from the ends of branches. There were two pale brown eggs mottled with a darker pigment in each.

Richmond (loc. cit.) recorded this from Car Nicobar, Trinkut, Tillang-chong, Great and Little Nicobar. Birds from Car Nicobar now stand as *procellia*.

\*1915. *Nectarinia jugularis procellia* (Oberholser) (Car Nicobar) Yellowbreasted, or Olivebacked, Sunbird.

1 ♂, 1 ♀, Car Nicobar: wings 52, 46; bill 15.5, 15.5, from feathers.

This was described as similar to *blanfordi* (now *klossi*) but smaller and with small bill (wing 49, culmen 16.5).

I saw many on Car Nicobar on 7th March, several visiting a patch of small blue flowers hardly a foot off the ground, at the aerodrome, together with *Lonchura striata*.

Davison (1874: 197) refers to a feeble, twittering, but pleasing little song uttered by males from exposed perches. In this position it is said to slightly open its wings and raise the axillary tufts.

*Aethopyga siparaja nicobarica* Hume (Kondal) Nicobar Yellowbacked Sunbird.

This form described from specimens taken at Kondal, Nicobar, by Hume (*Stray Feathers* 1: 412) was again obtained by Abbott and Kloss (Richmond 1903: 143) in Great and Little Nicobar.

The SYNOPSIS omits this race as also the occurrence of the species in the Nicobars.

[*Arachnothera longirostris* (Latham) (Bengal) Little Spiderhunter.

Tytler believed he saw it, but in the absence of any further records it may be best to omit it from the Andaman list.]

\*1936. *Zosterops palpebrosa nicobarica* Blyth (Nicobar) White-eye.

1 ♀ Bakultala, M. A.; 2 ♂♂ Car Nicobar.

Davison found young in February and Butler (1899: 390) noted them from both groups of islands, being more common in the Nicobars. Osmaston, (1906a: 156) said they were fairly numerous around Port Blair, where he found them breeding in June and July. I did not see them often. A bird dissected by Blyth (1845: 536) contained numerous hard black seeds about the size of No. 8 shot. Abbott & Kloss (Richmond 1903: 288) said it was the commonest bird on Barren Island.

The bills of the specimens obtained are appreciably heavier than of Indian birds, and this, together with the olive-green wash on the upper plumage, shows a greater resemblance to *Zosterops ceylonensis* Holdsworth from Ceylon than to Indian races of *palpebrosa*. Hume (1874: 242) noticed these characters but thought they were different from those on which Blyth (loc. cit.) had separated the Nicobar birds, describing the upper parts as 'greyish olive-green'. This was interpreted as a 'general lighter colour above' and prompted Richmond (1903: 288)



to separate the single bird he obtained from Car Nicobar as *Zosterops ventralis*.

\**Passer domesticus* subsp. House Sparrow.

2 ♂♂ Port Blair, S. A., 18th March 1964.

This is not mentioned by earlier observers. About half-a-dozen were introduced on Ross Island, Andamans, in 1882 by Mr. O. H. Brookes, who released another 20 in 1895 (Butler, 1899 : 557).

It is now quite common at Port Blair, and I saw it at Choldhari, South Andaman, too. The two specimens obtained are darker chestnut above and have a broader chestnut stripe behind the eye than in Indian birds, and appear very similar to those from Burma, which were at one time accepted as *confucius* Bonaparte. The mail steamer in those days apparently came from Rangoon, and it is not unlikely that birds were brought in from Burma.

[*Passer montanus* from Moulmein was introduced by Tytler (Beavan, 1866 : 419) but, though it appears to have fared better than *P. domesticus* introduced at the same time, there are no subsequent records and it has probably died out.]

\*1969. *Lonchura striata fumigata* (Walden) (South Andamans)  
Whitebacked Munia.

2 ♂♂ Pochang, S. A., Long Island, M. A.; 1 ♀ Long Island, M. A.; 1 ♂ Bakultala, M. A.

This is restricted to the Andamans, being replaced by another race in the Nicobars. It was noted on both South and Middle Andamans, where I saw them singly, in pairs, and in flocks of about 50. The last was on Long Island, where they visited the same patch of lawn every afternoon, not being seen in the neighbourhood in the mornings, indicating a regular circle of activity.

On 13th February, I saw one making a nest 20 ft. up in a tree, on the edge of a forest. The nest, which was not closely examined, appeared to be more compact than the usual munia's nest seen around Bombay.

Osmaston (1906a : 160) took many nests in June and July.

\*1970. *Lonchura striata semistriata* (Hume) (Nicobar Islands) Whitebacked Munia.

Butler (1899 : 557) said they were common and saw very young birds in August.

Abbott (Richmond 1903 : 297) noted them as common in the islands with open grassland, and did not meet them in the southern islands which are covered with dense forests. I saw them near the aerodrome at Car Nicobar, where they appeared to be common.